

(4 2 2 : 3.9 > 89 & 3) & 7) 8 2 & 3 : & 1

.LRPMBSARGML

ĽāYāŌŽā \ 'bAYāZANYbā^ā'ŸAUā | Žā'ā' b [DAŌ^āāNY@^āāUā | Žā'ā' b [Aāb@' | ŽāAb^Aa^ābŽ@AbāŽAa \ āāŽābAZŽ | Žā^~ & ŽābA^aA
 'bāAāb \ ZZābāA'āAYāAYb & ^ā~āŽ@ZA^aYŸY@ZAYāZAY^āYŽ@āĒA pāŽAŌŽā \ 'bA | Yā \ ŽA^aĒĪĪEAĪĪĪHGEĪĪĪĪĪAbāŽAYŸY@ZA^aA
 ŽYŸāYāZāŽ | Ž@ [A'āZ' | 'Z\YāDAYā^āāA { 'bāAbāŽAUā | Žā'ā' b ['āA & 'āā^āAb^ā' āā~ '@Zā'āZ' | 'Z\YāāAb^AZ' } YŽā'āA
 āZY@ā'āāDAāŽYZZ@āā~DAYāZāZ@ | 'YŽAYŸāā \ āAb^ā~@^ & ^bŽAbāZāA@^ { bāAYāZAZŽ | Žā^~ & ŽābA^aAbāŽA { ā^āZā~Žā^āĒA
 pā'āā'āAYāā^AY@b'Ÿ\āYbŽZā'āAbāŽAUā | Žā'ā' b ['āY^@Zā | Yā \ ŽāAbāYbYŸYāAa^@AbāZAY@ZŸYb^āA^aYAA^'ā^@^āAY~@^YŸYāA
 b^AāYā^āY@āā~DAYāā'āYā\ā' | ŽAY^ & & \ ā' b [A { āZ@ZAZ'āāZ@'āāA^'ābāA^aA | Ž { AYāZāZ' } ~Ž@'ŽāYŽAY@Zā | Yā \ ŽZDAYA
 Ÿ^ & & b & ŽābAb^āāY@'āāA^ \ @Aā'ābāDAYāZAYāAY~@ZŸ'Yb^āAbāYbA^ \ @A~Žā^āYāYāZAY^āāZŸYb' | ŽAYā^YŽāYŸYā
 Ÿ \ 'āZHYA & ^@Zā \ ābA { ^@āZĒAR \ @AY^ & & \ ā' b [A^āZāĀ'āāZ' } ~ŽYbYb^āāA^aAā { A { Žā' | ŽAYāZā'ābZ@YŸYbA { 'bāZŸYāA
 ^bāZ@AYāA { ŽAY@ZAYāā'ābZ@Y^āāZŸYbZAYāZAbā \ āAbāZAYŸYb^āāA^aAāZā^aA \ āAāYāYāZāZāZŸYbā^āA \ āAY^āāZŸYb' | Žā [EA
 ŠZā~ŽŸbAa^@AāZāāDA@Zā~ŽŸbAa^@A^āZ@āDA@Zā~ŽŸbAa^@A~@^~Ž@b [DA@Zā~ŽŸbAa^@AY \ bā^@'b [DAYāZāā^āZāb [DAY^bāA
 { 'bā'āAYāZā^ \ bā'ZZābāZāUā | Žā'ā' b [AY^ & & \ ā' b [AY@ZābāZā^ \ āZŸYb^āāAa^@A^ \ @AbYāZAY@Zā^āY^āZ \ ŸbĒAŌāA
 ^@ZZ@Aa^@A^ \ @AY^ & & \ ā' b [Ab^Abā@' | ZDAYāā & Ž & YZ@āA \ ābAYZAYŸYb' | Žā'āY^āb@'Ÿ \ b'āāAb^AYāZā' | @^ā & ŽābA { āZ@Zā
 ~Ž^~āZāZŽāYāZāā \ ābYāZāZāāYāZāZDAYāYāāZāāZDAYāZAY~@ZŸ'YbZŸĒU ŌŽā & \ ābAYāā^āA^aZā^ \ @āZ' | ŽāAYāZā
 ŽYŸā^bāZ@AYŸŸ^ \ ābYŸYāZā^@A^ \ @AYŸYb^āāAYāYA~Y@bA^aA^ \ @AY^ & & \ ā' b [Aā'āZĒ

.I 89 :) * 39 (43) : (9 8 > 89 * 2

89 :) * 39 (4) * 4 + (43) : (9

Tb \ ZZābāA Žā^āā'āāA'āA Ō^āāA NY@^āāA Uā | Žā'ā' b [A Yāā \ & ŽAYāA ^Yā'āYb^āA b^A YŽāY | Žā'āA YA & YāāZ@A
 Ÿ^ & ~Yb'ŸZā { 'bāA bāZā Uā | Žā'ā' b ['āA a \ āYb^āA YāA YāA ŽZ \ ŸYb^āYāA 'āāb' b \ 'āĒA pāZā ~ \ @~āZā ^aA bāZā
 Tb \ ZZābA N^āZā ^aA N^āZ \ ŸbDA āZ@Z'āA @ZāZ@Zā b^A YāA bāZā Tb \ ZZābA N^āZDA 'āA b^A ŽābYŸY'āāA bāZā
 Ž' } ~ŽŸYbYb^āāA@ZāY@Z'āāAāb \ ZZābā^AYZāY | ^@DAYāZAb^AZ' } ~YāZā \ ~āAbāZā@'āābAYāZā@Zā~āā'Ÿ'ā' b ŽāA
 ^aAāb \ ZZābāĒA pāZāZāā \ 'ZZā'āZāAY@Zā^ābAY@Ÿ' b@Y@ [AāZā'āāYb^āāY \ bāāY | ŽDAYābāZ@' @A~@' & Y@ [A~ \ @~āZDA
 bāZā { ŽāAY@Zā ^aA āb \ ZZābāAYāZā bāZā Žāb'@ZāŌ^āāA NY@^āāA Ÿ^ & & \ ā' b [ĒA pāZ [AāY | ŽāYZZāAa^@ & \ āYbZāZā
 { 'bāA bāZā ^YāZŸYb' | Žā'āA Z'@ZŸYb'āāA YāZāYāāZā'āāA bāZā Žāa^@bāA ^aA Ō^āāA NY@^āāA āb \ ZZābāA b^A { Y@ZAYā
 ā \ ŸŸZāāa \ ā \ ā' | Žā'ā' b [Aā'āZĒ

pāZāUā | Žā'ā' b [A'āAZZŸ'ŸYbZāā^āA^āā [Ab^AāZŸY@ā'āāAYāZAbāZāYZ | YāŸZ & ŽābA^aAāā^ { āZŽāZDAY \ bAYāā^A
 b^AbāZā { ā^āZāZŽ | Žā^~ & ŽābA^aA~Žā^ā'āāA { 'bā'āAbāZāNYbā^ā'ŸAYāZāŌŽā \ 'bAb^YZ' b^āāĒA pāZāUā | Žā'ā' b [A

^aAāb \ ZZā ā°B ā^b^ { ^

fi 1?AI MD 7CQNCAR DMP 5PMNCPRW

YÉA OááYá'ááA'áAbáŽA\áY\ba^@']ZZAžab@ [A'áb^DA\áŽA^aDA^@A^YŸ\~YaŸ [A^aA
Uá|žāb [A~ž& āžāē
YÉA OááYá'ááA'áAbáŽAYbbŽ&~bŽZA^@AYŸb\YáAbáŽabA^aDA&'á\áŽA^aDAZY&YáŽAb^DA^@A
ZZāb@ \Yb'^áA^aA'áāb'b\^áYáDAá@^ \~DA^@A~@ |YbŽA~@^~ž@b [DA'áYá\Z'ááAá'Y@Y@ [A
&YbŽ@YáāDAŸ^&~\bž@āDA^@AY^&~\bž@']ZZA'áa^@&Yb'^áē
YÉA OááYá'ááA'áAY@ā^áA^@AbáŽA'@žā~^áá'YáZA\áŽA^aAa'@žÉ
ZÉA S^āāžāā'ááA~@^~ž@b [AbáYbA'áA^áA [^\^@A^ {áDAā\YáAYāA^@^&Aæž [āA^@A
Uá|žāb [A'ZZāb'a'YŸb'^áē

ži 1?AI MD 7CQNCAR DMP &SRFMPGRW

YÉA Óābž@až@'ááA'ábžāb'^áYā [A { 'bāAYá [Aá^@ & YáAa\áŸb'^áA^aAYAUá |žāb [A
ā~^áā^@žZAYŸb' |b [DA^áA^@A^aaAYŸ &~\āē
YÉA Ú'^áYb'ááA~\Yá'áāžZA~^á'ŸžāAYáZÉ^@A@ \ážāAá^|žā'ááA@žā'žžāŸŽAáYāāDA
āb\žžābA^@áYá']Yb'^áāDA^@AbáŽAUá |žāb [É
YÉA OááYá'ááA'áA'āZáYáAY&Yá'ááē
ZÉA ŒY'á'ááAb^AY^&~ā [A { 'bāAZ'@žŸb'^áāA^aAUá |žāb [Až&~ā^ [žžāAYŸb'ááA'áAbáŽA
~ž@a^@ & YáŸŽA^aAbáž'@AZ\ b'žāÉAá'áá'áYá\žžāDAY\ba'āA^abAá' & 'bžžAb^DAÓNUSŇA
~ž@a^áāžāDAŠžā'žžāŸžAŌ'ažāAbYaaDAYāZÀNUAŇ'á'ááAbYaaÉ
žÉA OááYá'ááA'áAYŸbāA^@AZžžžāAbáYbA |'^áYbžžž' }'āb'ááAažžž@YáDAābYbžDAŸ^\āb [DA^@A
&\áŸ~YáAaY { āA^@A^@Z'áYáŸžāē
áÉA Šžā\á'ááAb^Aāā^ { A^@Aā \@@žāžž@AUá |žāb [A'ZZāb'a'YŸb'^áA\~^áA@ž* \žābY [A
Uá |žāb [Až&~ā^ [žžāAYŸb'ááA'áAbáŽA~ž@a^@ & YáŸŽA^aAbáž'@AZ\ b'žāē
áÉA ŒY'á'ááAb^AY~žY@AYžā^@žAbážANžYáA^aTb\žžābāA^@AZžā'áāžžÉ
áÉA ŒY'á'ááAb^AY^~ž@YbžA { 'bāAYá [ATb\žžābAN^áZ\YbAŁZ & 'á'āb@Yb^@EM^Y@ZAY [A
á^bAYž'ááAa^@bāŸ^ & 'ááAYāZA^ážābA { 'bāA'áa^@ & Yb'^áē
ÉA ŒY'á'ááAb^AY^&~ā [A { 'bāAZ'áŸ~ā'áY@ [AYŸb'^áāA' &~^ážžA'áAYAb' & žā [A & YáāžžÉ
žÉA Ú'^áYb'ááAYA~@'ābžZA~^á'Ÿ [A'āā\žžAY [AŁŸYZž & 'ŸAŁaaY'@āi

ži) 6QFMLCQRW

YÉA OááYá'ááA'áAYá [Aa^@ & A^aAZ'āā^ážāb [DA'áYá\Z'ááAYŸYZž & 'ŸAZ'āā^ážāb [ÉA
ĀTžžAŁŸYZž & 'ŸAŌ^ážāb [AS^á'Ÿ [A
ābb~IÉā' bžāÉa\ÉžZ\ÉžžYá^āb\žžābāÉ~YážāÉŸ^& & \á'b [EA
ābYáZY@ZāÉYŸYZž & 'Ÿéā^ážāb [ÉAB
YÉA Œ\@ā'āā'ááAaYāžA'žžāb'a'YŸb'^áAb^AbážAUá |žāb [Aæā^ { 'ááá [É
P'ā@ž~@žāžāb'ááA'áa^@ & Yb'^áAYŸ^\bA^ážāžāA^@A^bāžāA { ážāA~@^ |Z'ááA
'áa^@ & Yb'^áAb^AYAUá |žāb [A^aa'Ÿ'YáAYŸb'ááA'áAbáŽA~ž@a^@ & YáŸŽA^aAá'áēāž@A
Z\ b'žāē
YÉA OááYá'ááA'áAa^@áž@ [DAYābž@Yb'^áDA^@AbážA\áY\ba^@']ZZA\áŽA^aAUá |žāb [A
@žŸ^@ZāDAZ^Ÿ\ & žābāDA^@A'áāb@\ & žābāA^aA'žžāb'a'YŸb'^áē
ZÉA P'ā\á'ááA'áYáŸ'YáAYāā'ābYáŸžAŸZBAbā^\ááAa@Y\ZAYáZÉ^@AYŸ\ážÉ

pāžAYŸ^|žāž'Y&~žāAY@žA'āā\āb@Yb'|žā@Ybāž@AbáYáAž'áY\āb'|žÉAŌāAbážAž|žābAbáYbAbáž@žAY@'ážāA
ā^&žAY&Y'á'b [DA'áŸ^áā'ābžāŸ [A^@AžžžAa^@AYáY@a'ŸYb'^áA'áAbá'āAābYbž & žābDAā\ŸāZžā'á'b'^aDA
'ābž@~ž@Yb'^áA^@AYáY@a'ŸYb'^áAāāYāAYžāžž'žžžAY [AbážANžYáA^aTb\žžābāÉ

Tb\žžābāAāā^\áZAY^āā\ābAbážAUážž@á@YZ\YbžžÉŌ@YZ\YbžAM\āāžb'āāDAbážAN^&&\á'b [ATbYáZY@ZāA
PYá\YāDAbāžAŠžā'žžāŸžAŌ'ažāA^\á'ááAY^āb@YŸbDAbāžAŌ&&žžā'áAYáZATb\Z [AŁŸ^AYZALá@žž & žābāDA
YáZAbáž@A~\Yá'áāžžAUá |žāb [A~^á'ŸžāAa^@AYA^@žAY^&~āžžā'ābA^aAž' }~žŸYb'^áāAYāZA
@žā\áYb'^áāē

bā^āZāāb\ZZābā { ā^AY@Z@Z* \ '@ZZAb^Aā' | ŽA'āAbāZ@Zā'ZZāYŽAāYāāAa^@AbāZāAa^āā { 'āāA [ŽY@A
{ 'āāAYŽAYāā' āāZZAb^AYa@^^&AY [AbāZARaa'YŽA^aŠZā'ZZāYŽAŌ'aŽAYabZ@AYāābāZ@A@Zb \ @ā'āā
āb\ZZābāAāY | ŽAbāZā^~^@b \ ā'b [Ab^Aā'āāA \ ~ÉA Ū @'bbZāAā^b'a'Yyb'^āA^Abā'āAYyb'^āA & Y [AYŽA
~@^ | 'ZZZAb^Aā'āēāZ@~Y@ZābĀāBÉā \ Y@Z'YāĀāBA'aAbāZāāb\ZZābā'āAYAZZ~ŽāZābÉ

01) CDCPPCB 8SQNCLQGML

ŇŽāZ@ZZAT \ ā~Žāā'^āA'āAa^@AYaā~ŽY'a'Yā~Z@'^ZA^aAb' & ŽAYāZA'āAYaA^@&YāAā^b'YŽAb^AbāZā
āb\ZZābAbāYbAbāZAYyb | 'b [A'āA* \ Žāb'^āA'āA \ āYŸYŽ~bYŸāZAYāZA | Ž@ [AāZ@'^\ āÉAT \ ā~Žāā'^āA
{ 'āāA@Z & Y'āAZZāZ@ZZA \ āiZāāZ'āY'~ā'āY@ [AYyb'^āāAYāā'āāZZAY@Zā^bAY^&~ābZZAYāZÉ^@A
\ āiZāāY^āb'ā\ZZA'āY~@^~@'YbZAYŽāY | '^@Aa^āā { āÉAŁZZ'b'^āYāA | '^āYb'^āāA^AbāZāATb\ZZābA
N^ZZA { 'āāA & ^ābAā'āēZā [A@Zā \ ābA'āAā \ ā~Žāā'^āA^@AZ} ~ \ āā'^āAa@^&AbāZāUā' | Ž@ā'b [ÉAŌāAYZZ'b'^ā
b^Aā^\ ā'āā@Zāb@'Yb'^āāA^bZā \ āZZ@AUā | Ž@ā'b [A~@^Yyb'^āDAāb\ZZābā { ā^āY | ŽAYŽZā
~āYŸZā^āNŽāZ@ZZAT \ ā~Žāā'^āAa^@AYa~Z@'^ZA^aA & ^@ZAbāYāÉGAŸ^āāZŸ \ b' | ŽA { ŽZāā { 'āāA
ā^bAYŽA~Z@ & 'bbZZAb^A@Zā'ZZā'āMŽ@āZbAŌYāāA^@AYā [A^aaAYY & ~ \ āA~@^~Z@b'ZāAYZ & 'ā'ābZ@ZZA
Y [AbāZARaa'YŽA^aŠZā'ZZāYŽAŌ'aŽAa^@AbāZāAa^āā { 'āāA [ŽY@EAŠ'ā'āāŌ \ ā'^@āAYāZATZā'^@āA
{ Yāb'āāAb^Aā' | ŽA^āAYY & ~ \ āA { 'āāAYZ@Z* \ '@ZZAb^A & ŽZbA { 'bāAbāZāN'@ZŸb^@A^aAŠZā'ZZāYŽAŌ'aŽA
a^@AYa^āZÉ^āÉ^āZ@Z | Ž { A^aAā'āēāZ@AY^āZ \ YbAa'āZÉA Ū @'bbZāAā^b'a'Yyb'^āA^Abā'āAYyb'^āA & Y [A
YŽA~@^ | 'ZZZAb^Aā'āēāZ@~Y@ZābĀāBÉā \ Y@Z'YāĀāBA'aAbāZāāb\ZZābā'āAYAZZāā'

ĀĒĒBĀŸ\ ā'āžāāZY[āĒĀŌāĀŸYāžāā^āāž@'^\āā&'āŸ^āz\ŸbDAbāžĀUā'|ž@ā'b[A@žāž@|žāAbāžĀ@'áābA
b^ĀŸŸbA^āā@ž~^@bāāā^A&Ybbž@A{āžāAbāž[AŸ@žāā\Ÿ&'bbžžĒĒpāžĀUā'|ž@ā'b[A{āā'ā|žāb'áYbžA
Yāā@ž~^@bāĒ

ŌāĀŸYāžāA{āž@žAbāž@žA&Y[AŸžĀYA{bāžāāAb^ĀYāĀYāāžāžA|^āYb^āāDA^@A'āĀŸYāžāA{āž@žĀYA
āb\žžābA{ā^ĀYžā'ž|žāāāĒāžāYāĀYžžāAbāžĀ@žŸ~žābA^āYā^bāž@Aāb\žžāb'āā&'āŸ^āz\ŸbA
@ž^*\žābāAbāYbAbāžĀUā'|ž@ā'b[A~\@ā\žAbāžĀŸYāžāž|žāAbā^āāāāĒāžā'ā\ā{āā'āāAb^Aa\@bāž@A

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Ł áAYZ& 'á'áb@Yb' | ŽááŽY@ 'áá'áAYÁa^@ & YáááŽY@ 'áá'áY^áZ\ŸbŽZAY [A^áŽÁ^@Ab { ^BATb\ZZába

ÉÉÁ pāŽĀ^@áYá']Yb'^á'āAYZ| 'ā^@A'āA'ā | b'ZZAb^AYbbŽāZAbāŽĀāŽY@'āáÉ

ĐÉÁ pāŽĀ^@áYá']Yb'^á'āA~@Žā'ZZābAYáZĀ} ŽŸ\ b' | ŽĀ^aa'ŸŽ@āA { 'āāA \ ā \ Yāā [A^aa'Ÿ'Yāā [A
@Ž~@ŽāŽābAbāŽĀ^@áYá']Yb'^á'āAYbAbāŽĀāŽY@'āáDAYābā^ \ āāAYZZ' b'^āYāA^aa'ŸŽ@āAYáŽĒ^@A
& Ž& ŸŽ@āA^aAbāŽĀ^@áYá']Yb'^á'ā& Y [AYŽĀ' ā | b'ZZAb^AbāŽĀāŽY@'āáÉ

€ÉÁ pāŽĀ^@áYá']Yb'^āA { 'āāYŽAYāāŽZAb^Aā \ Ÿ & 'bAYA { @ 'bbŽāAābYbŽ& ŽābAYŸ^ \ bAbāŽĀ
'āŸ'ZZābAYáZĀ' bāA & Ž& ŸŽ@ā' ā | ^ā | Ž & ŽābAbāYbA { 'āāYŽĀ \ āŽZAZ \ @' āāAbāŽĀāŽY@' āáÉA
RbāŽ@ { 'āŽDAbāŽĀ^@áYá']Yb'^āYāAāŽY@' āáA { 'āāA^āā^ { AbāŽĀ~@^ŸŽZ \ @ŽāA \ bā' āŽZĀ' āA
TŽŸb'^āA000DAŌÉ

, I 8RSBCLR (MLBSAR - C?P6LE 5PMACBSPCQ

pā'āAāŽŸb'^āAZŽāŸ@'ŸŽāAbāŽĀ^@& Yb^aAbāŽĀāŽY@'āáAYāZAbāŽĀ@'āābā^aAbāŽĀ@Žā~^āZZābA'āAYA
āŽY@'āáA~@^ŸŽāāA0bAYāā^A'āŸā \ ŽZā'āa^@& Yb'^āAYŸ^ \ bA { 'bāŽāāŽāDAYZ| 'ā^@āDAbāŽĀZŸŸ'ā'^āÉ
& Yāā'āáA~@^ŸŽāāDAYāZAbāŽĀŸ^&& \ ā'ŸYb'^āA~@^ŸŽāāÉ

flI - C?P6LE +MPK?R

YÉA ŁAā'āáāŽĀ@ŽŸ^@ZAY^āā'āb'āāA^aA { @ 'bbŽāAā^bZāDA^@A^bāŽ@A & Žbā^ZāAāŽāŽŸbŽZĀ
Ÿ [AbāŽĀTb \ ŽZābAN^āZ \ ŸbAŁZ & 'ā'āb@Yb^@A { 'āāYŽĀ & YZZĀ^aAYāāāŽY@' āáāÉA
pā'āA@ŽŸ^@ZA { 'āāYŽĀ@ŽbY'āŽZĀa^@A^āŽĀ & ^ābāA^āā^ { ' ŽŸ^@Ÿ

āDAYáZAYā

áÉÁ Ł äáA~@^ŸŽŽ\|@YáA* \Žáb^ááAY@ŽAā\ŸáŽŸbAb^AbāŽAá^áYāAZŽŸ^á^áA^AbāŽAŸTb\ZZábA
N^áZ\ŸbAŁ.Z&^á^áb@Yb^@É

ŁI 8RSBCLR 7GEFRQ

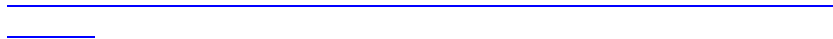
ŌāAbāŽAāŽY@^ááAā^b^a^ŸYb^AāAāŽbbŽ@AYāZAYáY^áAYbAbāŽAŸŽá^áá^áA^AbāŽAāŽY@^ááDAbāŽA
@Žā~^áZŽábA {^áAYŽAYZ|āŽZAbāYbAāÉāŽAāYāAbāŽA@^áábāAā^ábZZAYŽā^ {ÉATb\ZZábāA
{^bāAYá[A* \Žáb^ááAYŸ^bAbāŽ^@A@^áábāAY@ŽAāŸ^@YáŽZbAb^AY^AbYbAbāŽAŁāā^ŸYbŽA
NŽYáA^ATb\ZZábāÉ

- YÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^AYŽA^|ŽāAYāAŽ}~āYāYb^AāA^AbāŽAŸ^áZ\ŸbA
ā[ābŽ&AYāZAYāY@áŽāBÉ
- YÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^Aa@ŽZZ^&Aa@^&AāY@Yāā&Žāb^@A@ŽbYā^Yb^āAY[A
^bāŽ@āA^ā|^ā|ŽZA^āAbāŽAā^b\Yb^āÉ
- ŸÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^AbāŽA\āŽA^aAYāAY|Y^áYŸāŽA^ābŽ@āYāYāZ}bŽ@āYāA
ā\~^@bāāŽ@|^ŸŽā^āAZŽY^ááA {^bāAbāŽAYabŽ@&YbāA^AbāŽA^āY^ZZāBÉ
- ZÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^A^YāŽŸbAb^AYA&Ž&ŸŽ@A^aYATb\ZZábAN^áZ\ŸbA
M^Y@Za^@A@ŽYā^āāA^aA^aa^Ÿ^YāA^@A~Ž@ā^āYāY^āāā^ŸbA^a^ābŽ@ŽāBÉ
- ŽÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^AbāŽA~@ŽāŽāŸŽA^aYāAYZ|^ā^@A^aA^āÉāŽ@A
Ÿ^ā^ā^āáÉ
- aÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^AYŽA~@ŽāŽābAbā^A\āā^bAbāŽAāŽY@^áAY\AbA^bA
Z\@^áAbāŽAZŽā^ŸŽ@Yb^āāA^AbāŽATb\ZZábAN^áZ\ŸbAŁ.Z&^á^áb@Yb^@ÉM^Y@ŽÉ
- áÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^Aaēā^ {AYāāA^āa^@&Yb^āA~@ŽāŽābŽZAYáY^āābA
ā^&ÉāŽ@AYāZAb^A|^Ž {A~Ž@b^āŽābA&YbŽ@YāāAā\~^@b^āāAbāŽAYāŽAYáY^āābA
ā^&ÉāŽ@É
- āÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^A~@ŽāŽābA~Ž@b^āŽābA^āa^@&Yb^āAYāZAbāŽA
^āa^@&Yb^āA^aA {^bāŽāāŽāA}Ÿā\Z^āAYāY@ŸŸbŽ@A {^bāŽāāŽāAb^A
ā\ŸābYāb^YbŽAā^āÉāŽ@AYāZAYāZAb^A@Žā~^áZAb^AbāŽAYāY@áŽāYāY^āābA
ā^&ÉāŽ@ÉA^pā^ā^āYā\ZZā~@^~^ā^áA* \Žáb^áāAb^AYŽAYāēŽZA^a^AbāŽ@āA
^ā|^ā|ŽZA {^bāAbāŽAŽ}ŸŽ~b^āA^aAYZ|^ā^āÉ
- ÉA pāŽAāb\ZZábA^āAŽāb^bāŽZAb^Aa@ŽZZ^&Aa@^&AāY|^āáA^@@ŽāŽ|YābA~Ž@ā^āYāA
ā^āb^@ [AZ^āŸ\āāŽZA^AY^āā^ZZ@ZZAZ\@^āAbāŽAY^áZ\ŸbA~@^ŸŽāāÉA^pāŽA
Tb\ZZábAN^áZ\ŸbAŁ.Z&^á^áb@Yb^@A {āāAZŽbŽ@&āŽA@ŽāŽ|^YāŸŽÉb Y b^ā ā\ŸābYāb

"I 8S@QRGRSRGML MD 2CK@CPQ/6SMPSK

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YÉA Łaa'@&AbâŽŸ^âZ\ŸbAZŽŸ'ã'^âAYâZAbâ\ãAZŽâ[AbâŽAY~~ŽYàì
ÝÉA P^Z'a[AbâŽAY^âZ\ŸbAZŽŸ'ã'^âì
ÝÉA ŠŽb\@âAb^AbâŽA^@'á'âYâATb\ZZâbAN^âZ\ŸbAŁZ&'â'âb@Yb^@ÉM^Y@ZAa^@AYAâŽ{A
^@A~Y@b'YâA@ŽâŽY@'âáì
ZÉA ŠŽaŽ@AbâŽAYŸãŽAb^AYAâŽ{ATb\ZZâbAN^âZ\ŸbAŁZ&'â'âb@Yb^@ÉM^Y@ZAĀ&YæŽA
\~BAa^@AYAâŽ{A^@A~Y@b'YâA@ŽâŽY@'âáì
ŽÉA R|Ž@b\@âAbâŽAY^âZ\ŸbAZŽŸ'ã'^âÉ

aÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^AYŽA~@ŽāŽābAbā@^ \ āā^ \ bAbāŽāāŽY@' āāAY \ bāā^bAZ \ @' āāAbāŽA
ZŽā' YŽ@Yb' ^āā^AbāŽA T b \ ZŽābAN^āZ \ YbAŁZ & ' ā' āb@Yb^@ÉM^Y@ZÉ
áÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^A | Ž { A~Ž@b' āŽābA & YbŽ@' Yāā' ā | ^ā | ŽZā' āAbāŽAYāŽÉpāŽAāb \ ZŽābā' āA
Žāb' bāŽZAb^A~@ŽāŽāb~Ž@b' āŽābā' āā^@ & Yb' ^āAYāZAbāŽA' āā^@ & Yb' ^āā^A { ' bāŽāāŽāDAŽ' } Yā \ Z' āāA
YāY@YbZ@A { ' bāŽāāŽāAb^Aā \ YābYāb' YbŽAā' āēāŽ@AYāŽÉpā' āā' āYā \ ZŽāA~@^~ā' āāA * \ Žāb' ^āāA
b^AYŽAYāēŽZ^AAbāŽA@Žā~^āZŽābAYāZA { ' bāŽāāŽāē
āÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^Aa@ZŽZ^A & Aa@^ & AāY | ' āāA' @ŽāŽ | YābA~Ž@ā^āYāā' āb^@ [AZ' āY \ āāŽZā
^@AY' āā' ZŽ@ZŽAZ \ @' āāAbāŽAYāZ \ YbA~@^YŽāāÉAAbāŽA T b \ ZŽābAN^āZ \ YbAŁZ & ' ā' āb@Yb^@A { ' āā
ZŽbŽ@ & ' āZ@ŽāŽ | YāYŽBÉ
'ÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^A { @' bāŽāAZ^Y \ & ŽābYb' ^āA^AbāŽA^ \ bY^ & ŽāAAbāŽAY^āZ \ YbA
āŽY@' āāé
áÉA pāŽAāb \ ZŽābā' āAŽāb' bāŽZAb^A & YāēŽAY A { @' bāŽāAY ~ŽYāA^AbāŽAZ' āY' ~ā' āY@ [AZŽY' ā' ^āA { ' bā' āAā' | ŽA
ĀGBAY \ ā' āŽāāAZ Y [āA^AbāŽAYbŽA^Aā^b' ā' Yb' ^āA^AbāYbAZŽY' ā' āāÉAUā | Ž@ā' b [AZ' āY' ~ā' āY@ [A
Yb' ^āāAY@ŽAY ~ŽYāZŽAb^AbāŽANŽYāA^A T b \ ZŽābāÉ

pāŽAĪO^āāAN^Y@^āāAY^ & & \ ā' b [AŽāY^ \ @YāŽāAbāŽAŽ~^@b' āāA^aAY@' & ŽāAY [A@ŽY' ~ŽābāA^aYŽāY | ^@A
Y^āā' ZŽ@ZŽA & ' āY^āZ \ YbAb^AUā' | Ž@ā' b [A^aa' Y' YāāYāZA' aAY ~@^~@' YbŽDA^ \ bā' ZŽāY { AŽāa^YŽ & ŽābA
Y \ bā^@' b' ŽāÉA T ^ & ŽāDA@ŽY' ~ŽābāA^aAYā' bāŽ@Ab \ ZŽāb' āA & ' āY^āZ \ YbAY@ŽāāŽā' bYābAb^A@Ž~^@bAb^A
Uā' | Ž@ā' b [A^aa' Y' YāāAYŽY \ āŽAbāŽ [AY@ŽāY^āYŽ@āŽZAbāYbAbāŽ [AbāŽ & āŽā | ŽāA & Y [AYŽAYY \ āŽZ^A^a
~^ā' Y [A | ^āYb' ^āāDAā \ YāAYā \ āZŽ@YāZAZ@' āā' āāÉAObā' āA' āAbāŽAYŽābā' ābŽ@ŽābA^Abā' āāY^ & & \ ā' b [AbāYbAYāā
' ābŽ@~Ž@ā^āYā | ^āŽāYŽA^aaŽāāŽāAYāZ^AbāŽ@AYYbāA^a | ^āŽāYŽAY@Z@Ž~^@bZŽAb^AUā' | Ž@ā' b [A^aa' Y' YāāÉA
b^AŽāY^ \ @YāZAbŽ~^@b' āāDA' bā' āAbāŽAUā' | Ž@ā' b [' ā~@Yb' YŽAb^AYZZ@Žāā & ' ā^@A~^ā' Y [A | ^āYb' ^āā
@ŽāYbZŽAb^AbāŽā' āY' ZŽābAY [AYā~Ž@ā^ā@Z~^@b' āāYŽ' āāAbāŽA@ŽY' ~ŽābA^a' ābŽ@~Ž@ā^āYā | ^āŽāYŽA^@
AbāŽ@AYYbāA^a | ^āŽāYŽAbā@^ \ āā' āā^@ & YāA & ŽYāé

pāŽA { ŽāaY@ŽA^aAZHYāA & Ž & YŽ@A^a^ \ @AY^ & & \ ā' b [A' āA | Ž@ [A' & ~^@bYābÉAŁ' bAb' & ŽāDAY^ & & \ ā' b [A
& Ž & YŽ@āA^āAYāZ^A^aaAYY & ~ \ āA & Y [AāŽZAYāā' ābYāYŽÉO^āāAN^Y@^āāAZāY^ \ @YāZāAYāāAb \ ZŽābAb^A
^aaZ@AāŽā~AYāZAYāā' ābYāYŽAb^A^bāŽ@āA' āāŽZÉpāŽ@ŽA & Y [AYŽAb' & ŽāA { āŽāAb \ ZŽābAY@ŽāŽā \ YbYābA
b^AāŽā~A^ \ bA^aAY^āYŽ@āAbāYbAbāŽ [A & Y [AaYŽAZ' āY' ~ā' āY@ [AYYb' ^āA^@AYā~^ā' Y [A | ^āYb' ^āā \ YāAYā
 \ āŽZ@YāZAZ@' āā' āāAYbAbāŽAb' & ŽA^AbāŽA' āY' ZŽābÉUā' ā' āZ^~^ā' Y [A | ^āYb' ^āāAYāā^bAYŽA | Ž@ā^āēŽZDA
a^@A & ' ā^@A | ^āYb' ^āāDAYāZŽ \ Yb' ^āYāYāZÉ^@AāŽYbāAY^ā | Ž@āYb' ^āē' ābŽ@ | Žāb' āA & Y [AYŽA@Ž' * \ @ZŽA
YāAYāAYābŽ@āYb' | ŽAb^AZ' āY' ~ā' āY@ [AāYāYb' ^āāÉACE^@AYZZ' b' ^āYāA' āā^@ & Yb' ^āA@ŽāY@Z' āāAbāŽA O^āZ
TY & Y@' bYāAS^ā' Y [DAā^Ab^Aābb~ĪÉā' bZāÉY \ ÉZZ \ ÉZZYā^āāb \ ZŽābāÉ~YāŽāÉY^ & & \ ā' b [EābYāZY@ZāÉā^AZÉA
āY & Y@' bYāE~^ā' Y [AÉ

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YÉA Óābž' & Aā \ ā~žāā' ^āA & Y[AÝŽA' & ~^āžžIÀÈBAb^Ažāā \ @žābāžAāYāžb [AYāZA
 { žāāEÝž' ááA^aA & ž & Ýž' āā^aAbāžA Uā' | ž' ā' b [AY^ & & \ ā' b [A^@A~@žāž' | Yb'^āA^aA
 Uā' | ž' ā' b [A~@^~ž' b [I^@AĐBA' aAbāžA āb \ žžābA~^āžžāYāA^āá^' ááAbā@žYbA^aA
 Z'ā' \ ~b'^āA^aDA^@A' ābž' @āž' žāÝžA { 'bāDAbāžA ā^@ & YāA^~ž' Yb'^āāA^aAbāžA
 Uā' | ž' ā' b [É
 ÝÉA Ń \ @' ááAbāžA' ābž' & Aā \ ā~žāā' ^āDAYAāb \ žžābAāāYāāYžAZžā' žžAYÝžāāAb^A
 bāžA@žā' žžāÝžAāYāāāYāžÉ^@Ab^AbāžAÝY & ~ \ āā' áÝā \ Z' ááYāYāāžāBAYāžÉ^@A
 b^AYāāA^bāž' @AUā' | ž' ā' b [AYÝb' | 'b' žāA^@A~@' | 'ážāžāAa^@A { 'á' YāAbāžAāb \ žžābA
 & 'áābA^bāž' @ { 'āžAYžAZā' 'á' YāžDAYāAbāžANžYāA^aATb \ žžābāA^@AYAZžā' áāžžA
 & Y[Ažžbž' & 'ážAb^AYžAY~@^~@' YbžÉ
 ÝÉA ŁAāb \ žžābA { 'āāYžAā^b' a' žžA' āA { @' b' ááA^aAbā' āAYÝb'^āDAYāZAbāžA@žYā' āāAa^@A
 bāžA' ābž' @' & Aā \ ā~žāā' ^āÉ
 ZÉA PāžAāb \ žžābA & Y[A { 'bā' āAb { ^āāĐBAY \ ā' ážāāAZY [āA^aAbāžA' & ~^ā' b'^āA^aAbāžA
 'ābž' @' & Aā \ ā~žāā' ^āDA~ž' b'^āAbāžANžYāA^aATb \ žžābāA^@AZžā' áāžžAa^@A
 @ž' āābYbž & žābÉA PāžA~ž' b'^āA & \ ābAYžA' āA { @' b' ááDAYāZA & \ ābA' aÝā \ žžā
 ā \ ~^@b' ááAZ^Ý \ & žābYb'^āA^@A' āa^@ & Yb'^āAbāYbAbāžAāb \ žžābAZ^žāā^bA
 ~^āžDA^@Aā^Aā' áāž' @A~^āžāDAYAā' áá' a' ÝYābA@' āāA^aAā \ ÝābYāb' YāāY@ & Ab^AbāžA
 āžYābāA^@AāYāžb [A^aA^bāž' @āA^@Ab^A~@^~ž' @b [ÉAŁAZžY' ā' ^āA^āā \ ÝāA~ž' b'^āA
 { 'āāYžA@žYāžžAYāZAY^ & & \ ā' ÝYbžžA { 'bā' \ bA \ āZ \ žžāY [AY [AbāžANžYāA
 ^aATb \ žžābāA^@AZžā' áāžžÉ
 ŽÉA Pā' āA' ābž' @' & Aā \ ā~žāā' ^āAZ^žāAā^bA@ž' ~āYÝžAbāžA@žā' \ āY@AY^āZ \ ÝbA
 ~@^ÝžāāA { 'ā' ÝāA { 'āā~@^ÝžžA^āAbāžAā^@ & YāAāÝāžž \ āžDA \ ~Ab^AYāžA
 bā@^ \ áāAYATb \ žžābAN^āZ \ ÝbANM^Y@ZAāžY@' ááDA' aA@ž' * \ 'žžÉA Pā' āA' ābž' @' & A

ŌaYAāb \ ZŽāb'āA^ \ āZāābAōZā~āā'YāZāA^AYāābāZāYāY@āZāAā'ZŽAYáY'āābAā' & ēāZ@DA^@A' aAYA
āb \ ZŽāb'āAZ' \ āZ@YbZŽA^@AbāZāYāY@āZāAZ@~--ZŽDAbāZāYābZābā^aAbāZā'āZā' @ZŽYbā [A@ZāYbZŽA
b^AbāZā'āY'ZŽābA { 'āAYZāZ' & ^ \ ZŽAYāZAZŽāb^ \ [ZŽAYbAbāZāYā'āYā \ ā'āA^AbāZāYāYāZē

; .I 84 : 7 (* 8 & 3) 1.2.98 4+ & : 9 - 47.9>

Uāb' & YbZAUā' | ZŽā' b [AY \ bā^@' b [AYāZ@Zā~āā'Yā' b [A' āA & YbbZ@āA^aAb \ ZŽābYāZ \ YbA@Zā'ZŽA { 'bāAbāZā
S@Zā'ZŽābA^aAō^āāNY@^āāAUā' | ZŽā' b [ÉAbāZAS@Zā'ZŽābAāYāAZZāZāYbZŽA' & ZŽ'YbZāY \ bā^@' b [AYāZA
@Zā~āā'Yā' b [Aa^@Ab \ ZŽābYā'āZ \ YbDA \ āZŽ@AbāZāZāZ@Yāā \ ~Z@ | 'ā'āA^AbāZāU'YZAS@Zā'ZŽābA^aA
Tb \ ZŽābAŁ.aay' @āDAb^AbāZāNŽYāA^aATb \ ZŽābāē

pāZāNŽYāA^aATb \ ZŽābāāāYāZ | Zā~ā~ā'Y'ZāA^@AbāZāYZ & 'ā'āb@Yb^āA^AbāZāTb \ ZŽābAN^āZ \ YbA
T [ābZ' & AYāZA~@^YZZ \ @Yā@ \ āZāA^@AYāZ \ Yb'āāāZ'Y'āāāAbāYbAY@ZāY^āā'ābZābA { 'bāAbāZā~@^ | 'ā'āāA^aA
bāZATb \ ZŽābAN^ZŽÉpāZāNŽYāA^aATb \ ZŽābāA^@AZZā'āāZŽāāāYāāAZZbZ@ & 'āZābāZā~āA^aATb \ ZŽābA
N^āZ \ YbAŁZ & 'ā'āb@Yb^@āDA^ & ~ā' b' ^āA^aāZ'Y'āāāY^Y@ZāAYāZAY~ZāāYbZāY^Y@ZāDAYāZāāYāā
ZŽbZ@ & 'āZā { 'ā'YāY^Y@ZDA^@AYZ & 'ā'āb@Yb^@āāāYāāYZāY \ bā^@'] ZŽAb^āZāY@AZŽYāA & YbZ@ÉAN \ @'āāA
Y@Z'Yā~Z@^ZāDA'āYā \ Z'āāā \ & Z@DAbāZāNŽYāA^aATb \ ZŽābāA & Y [AYāZ@AbāZā~@^YZāāAb^A~@^ | ZŽāA^@AYA
b' & Zā [A@Zā'ā \ b' ^āAb^AYāY^ & ~āY'ābA'āZŽē

pāZāābYāZY@ZāA^@AYāZ \ YbAZZ'Y'ā'āē & Yē'āāAYbAYāāZ | ZāāA^AbāZāTb \ ZŽābAN^ZŽA^aAN^āZ \ YbA
~@^YZāāA { 'āāAYZā & YZZā^āAbāZāYā'āA^aA { āZbāZ@A' bā'āA & ^@Zā'āēZā [AbāYāā^AbāYbAbāZā~āZŽābA
| ^āYbZŽAbāZāTb \ ZŽābAN^ZŽē

Łā [A* \ Zāb' ^āA^aA'ābZ@~@ZbYb' ^āA^@AY~ā'Y'Yb' ^āA^AbāZāTb \ ZŽābAN^ZŽāāYāāYZāZ@ZŽAb^AbāZāNŽYāA
^aATb \ ZŽābāA^@A'āYāAZZbZ@ & 'āYb'āē

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pāZāNŽYāA^aATb \ ZŽābāA^@AZZā'āāZŽāāāYāāAZZā'āāYbZāTb \ ZŽābAN^āZ \ YbAŁZ & 'ā'āb@Yb^@āA
{ āA { 'āāAYāā \ & ZāZā~āā'Yā' b [Aa^@AYZ & 'ā'ābZ@'āāYāZāYāā'āāZŽAb^AbāZ' & AYāZA
YāZ \ Yb'āāAYZ & 'ā'āb@Yb' | ZāZāY@'āāē

'I 8RSBCLR (MLBSAR 'M?PBQ

pāZāNŽYāA^aATb \ ZŽābāA^@AZZā'āāZŽāāāYāāY@ZbZāb \ ZŽābAY^āZ \ YbAY^Y@ZāAb^āZ'Y@AYYāZāA
@ZāZ@ZŽAb^AbāZ' & ÉATb \ ZŽābAN^āZ \ YbAM^Y@ZāAYbAō^āāNY@^āāAUā' | ZŽā' b [A'āYā \ ZŽAbāZā
Tb \ ZŽābAUā' ^āAōZ'Y@'āāM^Y@ZDAbāZāUā' | ZŽā' b [AōZ'Y@'āāM^Y@ZDāōZ'Y@'āāSYāZāDAYāZAbāZā
Uā' | ZŽā' b [AŁ ~Z'YāāM^Y@ZÉA PZ & YZ@āā'~ā'āAbāZāZāY^Y@Zā'āY [AY~ā'āb & ZābA^@A
ZāZ'Yb' ^āAYāZāYā'ā'āYā \ ZŽāb \ ZŽābāDAAY' \ ab [DAYāZāābYāā & Z & YZ@āÉATb \ ZŽābAN^āZ \ YbA
M^Y@ZāA { 'āāAYZāY'āY@ZāY [AYāā^āE] ^b'āāAāb \ ZŽābA^@AY^āZ \ YbAYZ & 'ā'āb@Yb^@ÉAbāZāZā
Y^Y@ZāAY@ZāY \ bā^@'] ZŽAY [AbāZāNŽYāA^aATb \ ZŽābāAb^A@Z'Y^ & & ZāZā { āZbāZ@AYāAb \ ZŽābāYāā
| ^āYbZŽAbāZāTb \ ZŽābAN^ZŽDAYāZAb^A@Z'Y^ & & ZāZAZ'āY~ā'āY@ [AYYb' ^āāA { āZāAY~@^@'YbZē

(I (MLDGBCLR?JGRW

Tb \ ZŽābAN^āZ \ YbAŁZ & 'ā'āb@Yb^@āDA & Z & YZ@āA^aATb \ ZŽābAN^āZ \ YbAM^Y@ZāDA & Z & YZ@āA^aA
bāZāŁ ~Z'YāāM^Y@ZDAYāZAYZ | ā^@āAZ'āY~ā'āY@ [AYYb' ^āāAb^Aāb \ ZŽābāDA { ā'āZāY'Yb'āāA'āAbāZ'@A
^āā'Y'YāY'Y~Y'Y'Zā'āAā \ YāA~ā' b' ^āāDAāāYāāYZāZŽ & ZŽAb^AYYbAYāā~Z'YāYāā'ābYābāAb^A
bāZāNŽYāA^aATb \ ZŽābāDAā'āZā [Aa^@AbāZā~ \ @~āZāA^aA' & ~Y@b'āāAb^AbāZāZāZ'Y@'āāāAbāZā
Y'āā'ZŽāb'Yā' b [A~@^ | ZŽAY [A@Zā \ āYb' ^āāA^ | ZŽā'āāY^āāZāZāYāZā \ ā' | ZŽā' b' ZāÉA
N^āā'ZŽāb'Yā' b [AYāā^AY~ā'ZāAb^AbāZāY^ & ~āY'āYābāBDAYāZAYāāāb \ ZŽābāA'ā | ^ā | ZŽē

; ..I & 2 * 3) 2 * 398

5JC?QC @C ?U?PC RF?R RFC NPMTGQGMLQ MD RF@Q K?LS?J ?PC LMR RM @C PCE?PBCB ?Q ?LA
GPPCTMA?@JC AMLRP?AR @CRUCCL /MFL (?PPMJJ : L@TCPQGRW ?LB GRQ QRSBCLRQI 9FC : L@TCPQGRWA
PCQCPTCQ RFC P@EFR RM AF?LEC ?LW NPMTGQGML MP ?LW PCOS@PCKCLR ?R ?LW RGKCI

8RCN fl% pāŽAā@Ž|YāYŽA&\ābāYŽA~@ŽāžābŽZA'āA { @'b'āāAb^AbāŽAŃ'@ŽYb^@A^aATTŃÉpāŽATTŃA
^aa'YŽA'āā^YbŽZA^āAbāŽAÓY@ZZāŃŃ|ŽāA^aAbāŽAŁZ& 'ā'āb@Yb'^āAM\ 'āz'āāDA'āāŠ^&AŁE I ÉA pāŽ
TTŃA&Y'ā'āāAYZZ@Žāā'āATZ@ | 'YŽāA^@ATb\ZZābāA { 'bāAN'āY'ā'ā'ZāDAÉAŃāāANY@@^āā
M^\\āž|Y@ZDAUā | Žāā'b[AŃŃ'āābāDARā'^AFFÈÉ I ÉA pāŽATTŃA~ā^āŽAā\ & YŽ@A'ā
ĀĐÈHBAÉ I I EF Ī H I ÉAŃāAbāŽAŽ|ŽābAbāŽAā@Ž|YāYŽA'āAYāY'āābAbāŽAŃ'@ŽYb^@DAbāŽAā@Ž|Yābāāā\āZA
ā'āŽAbāŽAā@Ž|YāYŽA { 'bāAbāŽANŽYāA^AbāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāA'āā^YbŽZA'āAbāŽAMA Ū 'āā^aAbāŽA
ŃŽYāA^aAbāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāA'āā^YbŽZA'āAbāŽAMA Ū 'āā^aAbāŽA
ŁZ& 'ā'āb@Yb'^āAM\ 'āz'āāA'āāŠ^&AMĒĒĒĒpāŽA&Y'ā'āāYZZ@Žāā'āARāā'YŽA^aAbāŽANŽYāA^a
bāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāDAÉAŃāāANY@@^āāAM^\\āž|Y@ZDAUā | Žāā'b[AŃŃ'āābāDARā'^A
FFÈÉ I ÉA pāŽA~ā^āŽAā\ & YŽ@A^aAbāŽAN^āāžāŽA^aŁ @bāAYāZATY'ŽāYŽāA'āāĐÈHBAÉ I I EFĐÈĒĒ

Łā[Aā@Ž|YāYŽAāāYāāĪĀYBAŃY@ā[A'ZZāb'ā[AAbāŽAaYbāAYāZāŽ|ŽābāA@ŽāYbŽZA^AbāŽAā@Ž|YāYŽA
ĀYBA'ZZāb'ā[AYāāA@ŽāŽ|YābA~Ž@āāāAYāZAbāŽ'@A@Žā~ŽYb'|ŽA^āžāA'āAbāŽAZ'ā~\bŽĪĀYBAŽ}~āY'āAYāā
Žāā@bāA\āžž@bYæŽāAb^A@Žāā|ŽAbāŽA'āā\ŽA~@'^Ab^Aa'ā'āāYAA@Ž|YāYŽĪAYāZĀZBA'ZZāb'ā[AYā[A
ā~ŽY'ā'YAA'Žā'Žāāā\āābÉAU~^āA@ŽYŽ'~bA^aAYAA@Ž|YāYŽDAbāŽAŃ'@ŽYb^@A^@AbāŽANŽYāAāāYāā
Y'ābYbAbāŽA~Y@b'ŽāAYāZA~@^|'ZZAbāŽ&AbāŽA^~^@b\ā'b[Ab^Aā\Y&'bAŽ|'ZZāYŽAYāZA'ZZāb'ā[A
{ 'bāžāāžāÉA Ū 'bāžāāāābYbŽ&Žābā&Y[AŃYŽāā\Y&'bbŽZA'āA { @'b'āāA^AYŽAāžY@ZAY[AbāŽA
Ń'@ŽYb^@A^@AbāŽANŽYāAāā\āāž|'ZZāYŽAāāYāāYŽAā\Y&'bbŽZA { 'bā'āAb { Žāb[E^āžāāĐÈBAZY[āā
a^āā^ { 'āāAbāŽAā\Y&'āā'^āA^aAbāŽA { @'bbŽāAābYbŽ&ŽābÉ

pāŽAŃ'@ŽYb^@A^@AbāŽANŽYāAāāYāā@Ž|'Ž { AYāāA@Žāž|YābAŽ|'ZZāYŽDAYāZAāāYāāDA'āAY~@^~@YbŽDA
'ābž@|'Ž { AbāŽA~Y@b'ŽāAYāZA^bāž@A { 'bāžāāžāÉA pāŽAN'@ŽYb^@AāāYāābāŽāYāā\ābAYāā

: 3.; * 78.9> 84 (.&1 * ; * 398 <.9 - &1 (4 - 41

ÉÉÁ ÞáŽáŇ'ŽÝb^@A^aATb\ZZáBáLÝb' | b'ŽáA^@AZŽá'ááŽŽA & \ábAY~@^|ŽAZ|Žábá'á | ^á | 'ááAYáY^á^á
 { áž@Žáá\ZZábáAY@ŽA~@ŽáŽáS^ | 'á^ááA^@AáŽÝ | @b [A & \ábAYŽáY^@Z'áYbZZA { 'báBáŽA
 Ň'ŽÝb^@A^aATb\ZZáBáLÝb' | b'ŽáÉ

ÐÉÁ ŁááAYáY^á^á & \ábAYŽá~\@YáYáZZDAá^iZDAYáZAáYáZáZZAY [AÓNUAŇ'á'ááATŽ@ | 'YŽáA^@AŽ | ŽábáA
 ážáZA'áAY@ŽYáA { áž@ŽAÓNUAŇ'á'ááATŽ@ | 'YŽáA^@ZáBáŽáY^á^@YÝbA@'ááBáÉASZ@á^ááA~áá^@'ááA
 YÝb' | b'ŽáA { 'báAYáY^á^áážáZA'áA^báŽ@AY@ŽYáA^aAYY & ~\áA & \ábA^YbY'áAbáŽAY~@^@YbŽA
 ~Ž@ & 'báÉAŁáY^á^á'YAYŽ | Ž@YáŽáAY@ŽA^á^bA^AYŽA^áZAYbAYá [AŽ | ŽábáŽáZA'áAYAUá | Ž@á' b [AAYÝ'á' b [A
 á^bAY^ | Ž@ŽAY [AYAbYbZá * \^@Aá'YžáážÉ

€ÉÁ Tb\ZZáBáLÝb' { 'ááAYŽAYZ & 'bbZZAb^AŽ | ŽábáA^á [A { 'báAYA | Yá'ZYbZZAÓ^ááANY@^ááAUá | Ž@á' b [AÓŇAYY@ZA
 ŁQŇAY\@@ŽábAAbYbŽA'ZZáb'á'YÝb'ááÉ

FÉÁ ŁbAYááŽ | ŽábáA { áž@ŽAYáY^á^á'ááž@ | ŽZDAá^áEYáY^á^á'YAYŽ | Ž@YáŽáA & \ábAYŽA~@^ | 'ZZZAY [AbáŽA
 á~áá^@'áAYZ * \YbŽA~@^@^@'áAb^AbáŽAYáY^á^á'YAYŽ | Ž@YáŽáA^áYáZÉbáŽA~áá^@AYááA
 & \ábA~@^ | 'ZZáA^áZÉ

GÉÁ Q^A^áŽááá^áZAYŽáY^á^á'YžZDAŽ | ŽáAá \Yb [DAb^AZ@'ááA^@A^ | Ž@'áZ\ááŽÉAŁáA^Y^YáŽ | ŽábAbáYbA
 ŽáY^@YáZáZ@ \ááŽááŽááAYáYAbáŽ & ŽDA^@AbáŽAYZ | Ž@b'áž & ŽábA^aAá \YáYAáŽ | ŽábDA'áA
 \áYÝŽ~bYÝáŽAYáZA { 'ááA^bAYŽA~Ž@ & 'bbZZÉAŁZ | Ž@b'á'ááA^@A~@^ & ^b'ááAYáY^á^áYáAY~@' & Y@ [A
 YbbYÝb'ááA^aAYáAŽ | ŽábAYáZAbáŽA & Y@æŽ'ááA^aAYáY^á^áY [AYŽ | Ž@YáŽA & Yá \aYÝb\@Z@áDA
 Z'áb@Y\ b^@áDAÝá \YáDA^@A^@áYá']Yb'ááAY@ŽA~@^á'YbZZÉ

HÉÁ ŁáYá^á^áAYáá^bAYáZA { 'ááA^bAYŽááž@ | ŽZAb^A'áb^@'YÝbZZA~Ž@á^ááÉ

IÉÁ CE^@A^aEY & ~\áAYÝb' | b'ŽáA { 'báAYáY^á^áDAYAbá'@ZA~Y@b [A | ŽáZ^@A'áA@Ž * \^@ŽZÉ

, :.) * 1.3 * 8 + 47 9 - * 574 249.43 4+ * ; * 398
< - * 7 * &1 (4 - 41 <.11 ' * 8 * 7 ; *)

ÉÉÁ ŁááA & Y@æŽb'ááAYáZA~\Yá'Yb [A \áZZA^áEY & ~\áA & \ábAáŽ | Ž@AŽáY^@YáŽA | 'áYb'ááAYá [A
 Uá | Ž@á' b [A~^á'Y [É

ÐÉÁ PY@æŽb'ááAYáZA~\Yá'Yb [A & YbŽ@YááA & \ábAáŽ' báŽ@AŽáY^@YáŽAYá [Aa^@ & A^aAYáY^á^áAYÝ \áŽA
 á^@A & YæŽA@ŽáZ@ŽáYŽAb^AbáŽAY & ^\ábA^aAYáY^á^á'YAYŽ | Ž@YáŽáÉ

€ÉÁ ŁáYá^á^á'YAYŽ | Ž@YáŽáA & \ábA^bAYŽA~@^ | 'ZZZAYáY { Y@ZáAb^A'áZ' | Z\YáAb\ZZábA^@A
 ÝY & ~\áA^@áYá']Yb'áááÉ

FÉÁ Q^A \áY^á^b@ááZZAáY & ~á'ááAYáA~Y@bA^aAYY & ~\áA & Y@æŽb'ááA~@^áY & áAááYááYŽA~Ž@ & 'bbZZA
 YáZáA^áAY & ~á'ááA^@A^báŽ@A~@^ & ^b'á'áYáYÝb' | b'ŽáááYááA'áYá \ZZAÁZ@'áá'ááAY^á^bŽábáÁÉ

GÉÁ Úáž@ŽáY^á^b@ááZZAáY & ~á'ááAYáá^@ { ŽAY [AáY [AYáZAUá | Ž@á' b [A~^á'Y [DA' bA & \ábAYŽáA' & 'bZZA
 YáAb^Ab' & ŽAYáZA * \Yáb b [ÉAÞáŽáY^á^á \ & ~b'ááA^aAYáY^á^áA & \ábA^bAYŽAbáŽAá^áZá~\@~^áŽA^aA
 Yá [A~@^ & ^b'á'áYáYÝb' | b' [É

HÉÁ S@^@^b'á'áYáYÝb' | b'ŽáA & \ábA^bAYŽáYáá^YÝbZZA { 'báA^báŽ@ { 'ááŽ' 'áb'ááAY & ~\áA
 Ž | ŽábáA^@A~@^áY & áA { 'bá^bAbáŽA~@^A^@á^@ { áZZáZAYáZAY^ááŽábA^aAbáŽáŇ'ŽÝb^@A^aAT
 Tb\ZZáBáLÝb' | b'ŽáÉ

IÉÁ Ň'á~áY [A^@AY | YáYÝ'á' b [A^aA~@^ & ^b'á'áYáA & YbŽ@YááA & \ábA^áá^@ { AbáŽA~^á^á'áA~^á'Y [A
 ŽŽ | Žá^~ŽZAY [AbáŽáŇ'ŽÝb^@A^aATb\ZZáBáLÝb' | b'ŽáA^@Ab^A
 ább~íÉá' bŽááY \ÉZZ\ÉZZYá^áab\ZZábáÉ~YáŽáY^@ & \á b [ÉábYáZY@ZáÉ~^á'ááÉ

ÍÉÁ ÞáŽáŇ'ŽÝb^@A^aATb\ZZáBáLÝb' | b'ŽáA & \ábAY~@^ | ŽAYZ | Ž@b'á'ááA^@A & Y@æŽb'ááA^@AYáAŽ | ŽábAbáYbA
 áYáAYáY^á^áAY | YáYÝážÉ

(JC?LGLLE ?LB 2?GLRCL?LAC 5MJGAW

(JC?LGLLE ^AbáŽA~\Yá'YAY@ŽYáA'ááŽYáA^aAbáŽA@Žá'ZZáYŽáAYááá'áAZ^áŽá^aAYAZY á [AYáY'áDA'áYá \Z'ááA
 { ŽŽæŽáZáÉAŁáAÝááZ\áŽA^@AZY á [Ab@YááA@Ž & ^ | YáAYáZAYáYá'ááA^aAbáŽA@Žáb@^ & áA { 'ááAYŽA~^áBZZA^áAZÝYá
 @Žáb@^ & AZ^@ÉATb\ZZáBáA { 'báAYáY^á^áYŽ@áAYÝ^bAYáŽáá'ážááA^aAYá [AY@ŽYAY@ŽAYáæZZAb^Aá \Y & 'bAYA { ^@áA
 @Ž * \ŽábA { 'báA~ŽY'á'YAZŽY'ááA^AbáŽA'áá \ŽAYáAYŽAb@Žá^á | ŽZA'áAYAb' & Žá [A & YáážÉ

ÚažáYáŽYáááA@AbáŽA&YábžáYáYžAábYaaáAY@ŽááAY@žžb@^&Ab^AYáŽYáA^A&YæžAžž~Y'@āDAbāŽA
žžb@YáYžžāBA { 'āāYžžāYāāžžAYāZAYā^YæžžA^@A~žžA^aaEāOā'āa&YāZYb^@ [AbāYbāb \ZZābāA \āžYā^bāž@A
@žžb@^&AZ \ @āāAbāYAb' &žžEAbāžA \ á \ žžā'b [A@žžāž] |žžābāžA@ \āābAb^AbYæžžAžž'āY~ā'AY@ [AYYb'āAYāY'āābAYā [A
āb \ZZābāYbA | ^āYbžžāAbā'ā~ā'Y [É

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ŁāAYāAYžžžž & YāY^& \ á' b [DĀŌ^āāNY@ @āāUā | žžā'b [A'āY^& & 'bbžžAb^AY@žžYb'āāYāžžā | 'A^ā & žžāb^aA
'ā* \ @ [A { á'YāAZ & Y'YžžāHŌžžā \ 'bDANybāā'Yāžžž \ Yyb'āā'āYāžžY@YāA@Ab \ bāA { žžžžāYb'āAYāžžžYā^ā
Y^&~žž & žžābžžYā^āžžA'āāžžY@ā'āāEŁbāb' & žžābā'āā~ \ @ 'bA^aA'ā* \ @ [A & Y [A~@^Z \ YžžY^āā'Ybā^aA'ZžžYāDA
^~ā'āāDAYāZ~@^~^ā'YāāA^@AYYb'āāEAbāžA \ á \ žžā'b [A@žžYāā']žžā'bāA@žžā~āā'Y'ā'b [Ab^A~@^ | 'ZZāžžāžžYb' | žž
YāYāžžāAa^@'ābžž'āYāY^& & \ á' Yyb'āDā@žžžž'āY'āā'āDāYāZAbYb'āYā~žžā \ Yā'āAYāAbāžžā^& & YāYāZ
~@žžāžž@žžA & žžYāāAb^AY' @'āāYāZa@žžYāā']'āāZ'āžž'žžāžžāÉ

RāA^YžžYā'āAbāžžāžž~@žžā'āāA^aAZ'āāžžābābā@ \ áāā'āZ' | Z \ YāA^AY^āžžYb' | žžAYYb' | b [A & Y [AbYæžžābāžžA^& & A^aA
žž & āāb@Yb'āāEāOāA \ YāYāžžābāžžA \ žžā'b [A & \ ābāžžžAb^Ažžā \ @žžAYaY'@AYāZ@žžYā^āY'YāžžYāYžžā
Yžžb | žžžāb { ^āžžbāA^aA@'āābāEAbāžžA@'ābā'āAbāžžA@'āābA^AbāžžA & žž & YžžāA^AbāžžA \ á \ žžā'b [AY^& & \ á' b [Ab^A@žžā [A
~ \ @ā \ žžāžž@A^YāžžYb' | žžā' b'ā \ bA \ ā@žžYā^āYāžžA^Yāb@ \ Yyb'āāA^āā'āZ@YāYžžEAbāžžāžžYāZā'āAbāžžA@'āābAb^A
Y^& & \ á' YybžžAY [A~žžYžžā \ āAZž & āāb@Yb'āāYāZAZ'āāžžābābāžžA~ā'b'āāAbāYbābāžž [AY^āāY'žžāb \ áā [A
žž~ \ á' žžā^āA | bYā'āā \ žžāA^AbāžžAZ [EAbā'āAYYāYāžžAžž* \ @žžā@žžā~žžYbA^@AbāžžA@'āābāAYāZa@žžā~āā'Y'ā'b'žžāA^AY^bāA
bāžžā'āāb' \ b'āAYāZAbāžžā'āZ' | Z \ Yāā'ā | ^ā | žžā'āAbāžžAZžž & āāb@Yb'āāÉ

Ō^ { žž | žžDāžž' bāžž@Aāžžb^aA@'āābāA \ āb'ā'žžāžž^~Y@žž']'āāA^@AbāžžYbžžā'āābāžžāYāžž [A^aA~žžā^āāA^~@^~žžb [DA
'āYā \ Z'āāA | žž@Y^ { Z'āāA^aY^Y & ~ \ āAY@žžYāIā'ābžžāžžāžžāžž { 'bāA~@^YžžāžžāžžA^@~@^YžžZ \ @žžāA^āāb \ Yb'āDA
@žžžžY@YāDAYZ & 'āāb@Yb'āāA^@āb \ ZZābAYyb' | b'žžāY \ bā@']žžAb^AYžžYāžžā'Ybžžā'āA \ á \ žžā'b [AaY'ā'b'žžāA^@āA
 \ á \ žžā'b [A~@^~žžb [Iā | ^āYb'āāA^aAZābY'āāžžžY \ žž'āāā \ @āIā^@A^Yāb@ \ Yyb'āāA^AY \ bā@']žžAYžžžāāb^DA \ āžž
^aA^@AžžāžžāAa^& & \ á' žžā'b [AaY'ā'b'žžāEAT \ YāY^āZ \ Ybā'āAY^āb@Y@ [Ab^AbāžžA~ā'Y'žžāYāZāY^žžYb' | žžāA^AbāžžA
 \ á \ žžā'b [AY^& & \ á' b [EATb \ ZZābāA { āA~Y@b'Y'~Ybžžā'āAZžž & āāb@Yb'āāAYāZāA' & 'āY@AYYb' | b [A { á'YāA'ābžžāžžA
{ 'bāAbāžžA@'āābāA^AbāžžāA^@žžā [Aa \ áYb'āā'āāA^AbāžžA \ á \ žžā'b [A^@AY' | 'YāY^& & \ á' b [AY@žžā \ YāžžYbAb^A
Z'āY'~ā'āY@ [AYYb'āAYY^@Z'āāAb^AbāžžA \ á \ žžā'b [AAb \ ZZābAY^āZ \ YbA~@^YžžZ \ @žžāYāA { žžāAYāāžžāYāYyb'āAYāA
Y~@^~@^YbžžÉ

Œ^@AbžžYā^āāA^aAžžāžžYā'āā@ & Yb'āDāYāā'ābYāYžžDāY^@bžžā [AYāZā^āZa^@žžDāYāZAb^AYāā \ @žžAbāYbābāžžA
Uā | žžā'b [A'ā'ā'āY^&~ā'Yāžžā { 'bāAžžāYāYāZAY^žžāžž* \ @žž & žžābDAbāžžA \ á \ žžā'b [A~@^Yžžāāžž* \ @žžābāYbA
āb \ ZZābāY^ābžž & ~āYb'āāAZžž & āāb@Yb'āāYāZāA' & 'āY@AYYb' | b'žžāA & Yæžžābāžž'ā'ābžžāb'āāāā@' { ā'āAYZ | YāYžžA
b^AbāžžāžžYāA^ATb \ ZZābābā@ \ áāAYa & žžb'āāAb^AZ'āY'āāAbāžžAY@Yāāžž & žžābA^@Abāžžāžž | žžāYāZAY^& ~āžž'āāAYa
žž & āāb@Yb'āāAžžā'āb@Yb'āāA^& & Aa^@AY~@^ | YāÉ

bāžžA \ āžžA^AbāžžA \ á \ žžā'b [Aa^@ \ & Aa^@Ažž]~@žžā'āāA^a'ZžžYāA^@A | žž { ~'ābāAZžžāā^bA' & ~ā [AYYžž~bYāYžžA^@
žžā^@āžž & žžābAY | AbāžžA \ žžā'b [A^AbāžžA] | žž { āžž } ~@žžāžžÉ

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.11 * , & 1 & 3) 57 * 8 (7.59.43) 7 : , 8

bāžžA \ žžā'b [A~@^ā'Y'ābābāžžā'āāžžāYā \ āžžDA~āāžžāā'āāDāYāžžAZ'āb@ \ Y \ b'āDA & Yā \ aYyb \ @žžDAYāžžE^@A^@ { bāA^aA
'āāžžāYāDāā | ābāžžb'YDA^@AY^ \ ābžžāžž' bAZ@ \ áāA^āUā | žžā'b [A~@^ & 'āžžāA'āYā \ žžāA~@^~žžb [A~@^žžYbžžA^aaAbāžžA & Y'āA
Y^&~ \ ābDāYbAYā [A \ Uā | žžā'b [Aā~āā^@žžāžž] žžāb^@A~@^ā@Y & Aā'āYā \ Z'āāAb \ Z [AYY^@YZAYāZa' & žž@ā'āA
žž]~žž' žžāYžžābāžžāY@žžāāA^aA { āžž@žžā'ābYæžžāA~āYžžEāŁā^Y'Yb'āA { 'bāA'āYā \ Z'āāAbāžžA~@žžāžžāY'YbA
āYbāžž@'āāā'ā | ^ā | 'āāā \ YāA \ āžžDA~āāžžāā'āāDāYāžžAZ'āb@ \ Y \ b'āDA & Yā \ aYyb \ @žžA^@A^@ { bāA'āYāā^A
~@^ā'Y'žžžžEā^āāžžāā'āA^@A \ āžžA^ažž* \ ~ & žžābDA~@^Z \ YbāDā^@A & Ybžž@'YāāDābāYbAYžžA \ āžžA^@AY@žžAbžžYā^āYā [A
Yāb'Y'~YbžžAb^AYžžA \ āžžA'āAbāžžA & Yā \ aYyb \ @žžDā^@ { bāDAZ'āb@ \ Y \ b'āDāYāžžA^@A \ āžžA^aA'āāžžāYāDāā | ābāžžb'YDA^@A
Y^ \ ābžž@āžž' bAZ@ \ áāA^@A'āAbāžžA & 'ā \ āžžDāYāžžA^@AZ'āb@ \ Y \ b'āA^aA~@žžāY'~b'āāAZ \ áāā'āA~@^ā'Y'žžžžE@O)Y & ~āžžāA^aA
žž* \ ~ & žžābDA~@^Z \ YbāDāYāZa & Ybžž@'Yāā'āYā \ žžžAY \ bAY@žžā^Abāžž' & 'bžžAb^AY^āāāā~ \ @YāYāžžA^@A^&žžE & YžžBDA

~'~žāDA@hāāáA~Y~žāDA|Y~^@'jžāDAāYyāžāDAYāZAá@'āZZ@aÉ

pāžA&'ā\āžA^aA~@žāY@'~b'^āAYāZ^A|žāAbāžāY^ā\ābžAZ@ \āā'āA^bA~ž@&'bbžžÉA pā'ā'āYā\žžāAāY@'āāAYA
~@žāY@'~b'^āA { 'bāA\āY\ bā^@' } žžA~žā^āāDAžžā'āāAYA { ā^āžA^@A~Y@b'YāA~@žāY@'~b'^āAb^A\āY\ bā^@' } žžA
~žā^āāDA'ābžāb'^āYāā [AY^&'Y'ā'āāAYA~@žāY@'~b'^āA { 'bāA^bāž@Aā\YābYāYžāDA~^āāžāā'āāÉ\ā'āāAYA~@žāY@'~b'^āAZ@ \āā
ā^bA~@žāY@'YžžAb^A [^\ DAYāZA'ābžāb'^āYāā [AZ}Yžžž'āāAbāžA~@žāY@'YžžAZ^āYāžA^aYAZ@ \āÉ

Tb \žžābāAa^ \āZAžā~^āā'YāžAbā@^ \āāAbāžāY^āZ\YbA~@^YžžāAa^@AbāžāYāžDAZ'āb@'Y\ b'^āDA & Yā \aYŸb \ @žDA
YāžÉ^@Aā@^ { bāA^aA'āāžāYāDAā [ābāžb'YDA YāžÉ^@AY^ \ ābž@až' bAZ@ \ āāāā^ \ āZāž } ~žYbAb^A Yžžā \ ā~žāžžA^@AZ } ~žžžžA
a@^ & AbāžA \ ā' | žžā' b [ÉA pā' āAYāā^AY ~~ā'žāb^Aāb \ žžābāA^ \ āZA@žā~^āā'YāžAa^@AbāžāYāžAYāžÉ^@AZ'āb@'Y\ b'^āA^aA
~@žāY@'~b'^āAZ@ \āāÉ

Pž&Yž@ā^aAbāžA Uā' | žžā' b [AY^& & \ā' b [AY@žāž } ~žYbžžAb^AYžAY { Y@žA^aYāZ^A^Yž [Aažžž@YāDAābYbžDA YāZA
& \ā'Y'~YāāY { āA^@A^@Z'āYāYžāA@žā \āYb'āāAbāžA \āžDA~^āāžāā'^āDAāYāžDAZ'āb@'Y\ b'^āDA & Yā \aYŸb \ @žDAYāžÉ^@A
ā@^ { bāA^aA'āāžāYāDAā [ābāžb'YDA^@AY^ \ ābž@až' bAZ@ \ āāÉA pā'āžA { ā^AY@žāY' bžžAa^@A | 'āYb'^āāA^aAāY { A^@A
^@Z'āYāYžāAY [DAažžž@YāDAābYbžA^@A & \ā'Y'~YāAY\ bā^@' b'žāā&Y [AYāā^AaYŸžA Uā' | žžā' b [AY^āZ\YbA~@^Yžžž'āāāÉA
pāžA Uā' | žžā' b [A@žāž@ | žžābāžA@'āābAb^AbYæžAZ'āY'~ā'āY@ [AYŸb'^āAYāY'āābAYā [Aāb \žžābAa^@A^aEŸY & ~\āā
YžāY | ^@AbāYbA | ^āYbžžābā'āA~^ā'Y [É

Tb \žžābāAāā^ \āZAYžAY { Y@žA^aAbāžA~žāYāb'žāAa^@AZ@ \āA | ^āYb'^āāÉA Tb \žžābāA { ā^AY@žāY@' & 'āYāā [AY^ā | YbžžA^aA
Z@ \āA^aA'āāžāžā&Y [Aa^āžāžžž@YāA^@AābYbžā'āYāY'YāY'ZÉA Tb \žžābāA { ā^Aa^āžAY'Z\žžAb^AZ@ \āA | ^āYb'^āāA
YŸāY^ābYŸbAbāžACE bāYāY'YāY'ZURaa'YžAYbAÉHT ^@ÉYāB É M šb \Z āaY' \ @ÉÉHP \ @

ŽŸ@ZDabâŽAâb\ZZâbâYâAbâŽA'ââAb^A~âYŸŽAYââbYbŽ&ŽâbA { 'bâAbâŽA@ŽŸ^@ZââŽbb'ââAa^@bâââ'âA^@AâŽ@A
| Ž { AYŸ^ \ bAbâŽAŸ^âbŽâbŽZA'âa^@ & Yb'^âÉ

€ÉA PaŽA@'ââbAb^AŸ^ââŽâbAb^AZ'âŸ^â\@ŽâA^aA~Ž@â^âYââ [A'ZZâb'a'YŸâŽA'âa^@ & Yb'^âAŸ^âbY'âŽZA'âAbâŽA
âb\ZZâbâAŽZ\ŸYb'^âA@ŽŸ^@ZâDAŽ}ŸŽ~bAb^AbâŽAŽ}bŽâbAbâYbACEOŠSŁAY\ bA^@]ŽâAZ'âŸ^â\@ŽA { 'bâ^ \ bA
Ÿ^ââŽâbÉ

RâŽAŽ}ŸŽ~b'^âAbâYbA~Ž@ & bâAZ'âŸ^â\@ŽA { 'bâ^ \ bAŸ^ââŽâbA'âAZ'âŸ^â\@ŽAb^AâŸ^â^âA^aa'Ÿ'YââA { 'bâA
âŽâ'b' & YbŽAŽZ\ŸYb'^âYâA'âbŽ@ŽâbâÉAŁAâŸ^â^âA^aa'Ÿ'YâA'âAYA~Ž@â^âAŽ&~â^ [ŽZAY [AbâŽAUâ | Ž@â'b [A'âAYâA
YZ&'â'âb@Yb | ŽDAâ \~Ž@ | 'â^@ [DAYŸYZŽ&'YA^@A@ŽâŽY@ŸâDA^@Aâ \~^@bAâbYaa~^â'b'^âAâ'âŸ^â\Z'ââAŸ { A
Žâa^@ŸŽ&ŽâbA \ â'bA~Ž@â^ââŽâAYâZââŽYâbâAâbYaaBIAYA~Ž@â^âA^@AŸ^â & ~Yâ [A { 'bâA { â^ & AbâŽAUâ' | Ž@â'b [A
âYâAŸ^âb@YŸbŽZââ\ŸâAYâAYâAYbb^@âŽ [DAY\Z'b^@DA^@AŸ^ââŽŸb'^âAYâŽâbBIAYA~Ž@â^âAâŽ@ | 'ââA^âAbâŽA
Ÿ^Y@ZA^aAZ'@ŽŸb^@âiA^@AYAâb\ZZâbAâŽ@ | 'ââA^âAYâA^aa'Ÿ'YâAŸ^â & 'bbŽZDAâ\ŸâAYâAYAZ'âŸ^â'âY@ [A^@A
â@ Ž | YâŸAŸ^â & 'bbŽZDA^@AYââ'âb'ââAYâ^bâŽ@AâŸ^â^âA^aa'Ÿ'YâA'âA~Ž@â^@ & 'ââA^âA^@AâŽ@AbYâââÉAŁA

Ž&Žážáŷ[A~ŽááážáÉPaŽAÓ^ZATY&Y@bYaAS^áŷ[AY~áŽááAá\Yb^ááA^á|ááAYáŷá^áDA
^báŽ@AZ\ááDAábž@~ŽáááYáA|ááŽáŷZDAYáZ^báŽ@Aá\Yb^ááAY^ááZŽ@ŽZAYááZ@^áŷ[AYA
@ŽYááYáZá~ŽáááÉA9FGQ KC?LQ RF?R LM DMPK?J : LGTCPQGRW B@QAGNJGL?PW ?ARGMLQ MPA
Q?LARGMLQ U@GJ @C ?QQGELCB RM RFC PCNMPRGLE QRSBCLR^Q^DMP K@LMP T@MJ?R@MLQ PCJ?R@LE RMA
RFC @LAGBCLRi PaŽA^áŷZžáA { ááAáb ááAYžAZ^ŷ\ & ŽábžZAYáZáZŷŷYb^ááYáYáZÉ^@áážYábA
ŷ^á|žááY^ááÉábž@|žáb^ááA&Y[AYžA@ž* \ @žZAYáAYáAYábž@áYb|žAb^AZ^áŷ~ááY@[AáYáŷb^ááÉ

PááA~^áŷ[AZ^žáá^bA~@^bžŷbA@ž~žYbžZDAaYáYáBDA^@Aáž@^á|áA|ááYb^ááA^aAbáŽATb\ZžáBaN^ZžAžÉáÉA
Yŷ\á|žáŷ^áZ\ŷbDA^ábž@~žáááYáA|ááŽáŷZDAYáZ^báŽ@Aá\Yb^ááAYáŷá^ááAYáZÉ^@A^báž@AZ@^ááDAáY]ááDabážAbDA
~@^~ž@b[AZY&YážDAžbŷÉBA^@A|ááYb^ááAbáYbAáY@&AYá^báž@A~žááA@ž* \ @^ááZ&žážáŷ[A@žá~^áážDA^@A
Z^žáAbážA~^áŷ[A~@žŷá\ZžA^@A~@ž|žábAYŷb^ááY[A~^áŷžA^@AžáYáY\bA^@b^žáÉ

ÓáAYáá^b\Yb^ááA^á|á|ááA^& & ážáBZYááž@Ab^AbážAážYábáAYáZÉ^@AáYážb[A^aAYá[A^áZ|Z\YááBDAáb\ZžáBáAY@žA
ž}~žŷbžZAb^i

- ÉÉA N^ábYŷbAÓNUSŇAÁĐÈHEÉÍ IEÉĐ€FBDAŠžá^ZžáŷžAÓ^ažDA^@A^báž@Až&žážáŷ[A
^aa^ŷYááAb^A@ž~^@bAbážA^áŷZžábi
- ĐÉA Šž&Y^áA { bAbážA^áZ^|Z\YááBBAážžž^ááž&ž@ážáŷ[Ab@žYb&žábAYáZAY^~ž@YbžA { bAA
ž&žážáŷ[A~žáá^áážáAYáAááAYáA^ááAYáZAb^AZ^A^i
- €ÉA PžžbA { bAAAY~@^~@YbžAUá|ž@á^b[A^aa^ŷYááAYabž@AbážA^áŷZžáBAYáZAY^~ž@YbžA { bAAAYá[A
Uá|ž@á^b[A^á|žáb^áYb^ááÉ

ŒÉY^á\@žA^aAb\ZžáBAb^AbYá@žA@žá~^áá^YážAYŷb^áA^ážž@Abá^áA~^áŷ[A { áž@žAYŷb^áA^áAYážY@á[A { Y@@YábžZ
YáZáAY@&A@žá\ábáA&Y[DA^áAžážá^á\áŷ^ŷ\ & ábYáŷžAáŷ^ááb^b\bžAAžáZAYááž@^ááAYá[A~žáá^áž^báž@A
^ábžá^ááYáA[A^@A@žŷ^aážáá[A^á^ážž@AbážATb\ZžáBaN^ZžAYáZAY^áZážá\ábA^áAZ^áŷ~ááY@[AYŷb^áAbá^@^ááAbážA
Tb\ZžáBaN^áZ\ŷbAT[áŷ&ÉAbá^áA~^áŷ[AZ^žáA^bA~@^|ZžAY&ážáb[Aa^@Aáb\ZžáBáA { á^A@ž~^@bAbáž@A^ { áA
&žžŷYáž&žážáŷ[É

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Ó^ááANy@^ááAUá|ž@á^b[A^áAY^& & bžžAb^Aa^ábž@^áážbá^ŷYáAYáZA & ^@YáA|Yá\žáAbáYbAY@žáŷ^áá^ábžáB { bAA
Óžá^bAYáZANyBá^áŷAb^YZ^b^ááÉA& & ááAbážAYžáB^YáA|Yá\žáA^aAbážAUá|ž@á^b[A^AY@žAbážA^ááž@žáB^áá^bžáA
^aAž|ž@[A^áZ|Z\YáAYáA { žááAYáAbážA@^ááAb^ažŷYá~ž@á^Ab^A^áZAYáZAb^Až}~@žááá^á^@Až@A|ž { ~^ábÉA
ÚážáAbážážA|ž { áŷ^ááá^ŷbA^áAbážA^áŷ^áYb^áA^aA&ž&ŷž@áA^AbážAY^& & \á^b[Ab^A@žá~žŷbAbáž@A
~ž@á~žŷb|žáÉ

PažAUá|ž@á^b[A { žáŷ^&žáAb\ZžáBDAAYŷ\áb[DAábYaaDAYáZA|á^b^@áA^@AZ|ž@ážAYŷ^a@^á\áZáAYáZAbA { ^@aáA
b^Ažáá\žAbáYbAbáž[A { ááA^áZAbážAUá|ž@á^b[Ažá|^@^á&žábA@žžA^aAZ^áŷ^&^áYb^@[AY^áZ\ŷbÉAÓBa^á
\áŷŷž~bŷŷáZAYáZAY|ááYb^áA^aAUá|ž@á^b[A~^áŷ[Ab^AAY@YááDAYŷ\ážDA^@AZ^áŷ^&^áYžAYá^ááAYá[A
~ž@á^áAYžŷ\ážA^AYážDA^YŷžDA^ážž@DAžbá^ŷb[DAáž]\YáA^@žábYb^áDA@žá^á^áDA^@AZ^áŷ^á^b[É

Ó^ááANy@^ááAUá|ž@á^b[Ažžá^ážáAYbžÉ & ^b|YbžZA^aažážáAYáAYá[AY^áZ\ŷbAáAYáA&žábA^@A~á[á^ŷYáA
YŷbAbAZ^žŷbžZAYbAYáA^áZ|Z\YááBBA^aAbážAYá^áA^aAYážDA^YŷžDAžbáá^ŷb[DAážž@DAáž]\YáA^@žábYb^áDA
@žá^á^áDA^@AZ^áŷŷ^á^b[A { bAA^ábžáb^áAb^A^áb^&^ZyžA^@A^á\@žAYáA^áZ|Z\YááBBA~á[á^ŷŷ[DA&žábYáA[DA^@A
ž&^b^áAYáA[ÉAÓYbžA&^b|YbžZA^aažážáAY^&~@^&^ážAbážA^ábžá^b[A^aAbážAÓ^ááANy@^ááAUá|ž@á^b[A
ŷ^& & \á^b[AYáZAY^áááb^b\bžA|ááYb^ááA^aAbážAÁOááYá^áA^áAY^Yáá&žábAYážžA^áAYážDA^YŷžDA^ážž@DA
žbáá^ŷb[DAáž]\YáA^@žábYb^áDA@žá^á^áDA^@AZ^áŷŷ^á^b[A~@^|á^á^aAbážATb\ZžáBaN^ZžAážŷb^áAbYBÉA&á^AYáA
ŷYážáA^aA&^áŷ^áZ\ŷbDA^áŷ^áZ^ááAYbžA&^b|YbžZA^aažážáADAY^bAbážA@žá~^ážžábAYáZAbážAb\ZžáB { á^A
ŷžá|žáááéážáAYáŷžžáAY@žŷ~žábA^aAbážA@žá~^ážžábA&^áŷ^áZ\ŷbAAY|ž@^áábAbáYbAY@žA^á^bžA
bA^@^áAbážATb\ZžáBaN^áZ\ŷbAS^ŷžááÉPažážA@^áábAY@žáŷ^áY^ážžA^áAbáž^@Ažáb^@žb[Aáž@žA
[ább~jĚĚá^bžáŷŷŷĚZŷĚžŷá^ááb\ZžáBáÉ~Yážáŷŷ^& & \á^b\[ÉábYáZY@žáŷŷ^áZ\ŷbÉa|ábž&É](#)

P Ž & Ÿ ž ā ā a b ā ž ā ō ā ā n y @ @ ^ ā ā u ā | ž ā b [a Ÿ & & \ ā b [a y ā ā ž Ÿ b ž z ā y [a ā y b ž ē & ^ b | y b ž z ā ā ā ž ā ā y ž ā ā b @ ^ ā ā ā [a ž ā Ÿ y b \ y ā ž z ā ā b ^ ā ž ~ ^ @ b ā b ā ž ā ž ā ā Ÿ z ā ā ē ā t \ Ÿ ā ā ā ā ā ž ā ā Ÿ ā ā y ā Ÿ ā ā ž ~ ^ @ b ž z ā ā b ^ ā y a | y @ ž b [a ^ ā ā ā ā ā Ÿ ž ā ā ā ā Ÿ y & ~ \ ā ā ā Ÿ ā \ z ' ā ā ā ā n ž y ā ā ā t b \ z ž ā b ā ā r ā ā Ÿ ž ā ā ā ā š ž ā z z ā Ÿ ž ā ō ā ž ā ā ā ā ā n y @ @ ^ ā ā ā s ^ ā Ÿ ž ā ā n ž ~ y @ b & ž ā b d a y ā z ē ^ @ b ā ā ^ \ ā ā ā b ā ž ā m \ y ā ā ō ā Ÿ ž ā ā b ā š ž ~ ^ @ b ā ā ž ā ā b b ~ ě ě ā b ž ā ē ā Ÿ \ ě z z \ ě y \ y ā ē ~ y ā ž ā ē ž ~ ^ @ b ē y \ y ā ē

T b \ z ž ā b ā ā ^ \ ā z ā ž ā ~ ^ ā ā Ÿ ā ž ā ā ^ ā ā y b ž ē & ^ b | y b ž z ā | ^ ā y b ^ ā ā ā y @ ž ā ā \ Ÿ ā ž Ÿ b ā b ^ ā y a @ y ā ā ž ā ā z ā Ÿ ~ ā ā y @ [a y Ÿ b ^ ā ā ā \ ~ ā b ^ ā y ā z ā ā Ÿ ā \ z ' ā ā ā ž } ~ \ ā ā ^ ā ā @ ^ & ā b ā ž ā u ā | ž ā b [ē

p ā ā ā ~ ^ ā Ÿ [a ā ā ā ž ~ y @ y b ž ā y ā z ā Ÿ ā b ā Ÿ b ā ā ^ & ā b ā ž ā ō ā ā n y @ @ ^ ā ā ā u ā | ž ā b [a t ž } \ y ā ā ō y y ā ā & ž ā b ā ~ ^ ā Ÿ [ā b ā y b ā Ÿ y ā ā Ÿ ž ā ā ^ \ ā z ā ā ž @ ā ā b b ~ ě ě ā b ž ā ē ā Ÿ \ ě z z \ ě y \ y ā ē

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Ō b ā ā b ā ž ā ~ ^ ā Ÿ [a ^ ā ā ō ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [ā b ā y b ā ā y] ' ā ā ā y Ÿ b ' | b ž ā ā ā y ā [ā b [~ ž ā y @ ž ā ā Ÿ ā ā ā ā b ž ā b ā { b ā ā ž z \ Ÿ y b ^ ā ā y ā z ā y @ ž ā ~ ^ ā Ÿ b ž z ā y b ā y ā ā b ' & ž ā ē ā q ^ ā ā b \ z ž ā b d ā ' ā Ÿ ā \ z ' ā ā ā ā ž y z z @ ā ā ā ā ā b \ z ž ā b ā ^ ā y ā '] y b ^ ā ā ā & y [a ~ ā y ā d ā ž ā Ÿ \ @ y ā ž d ā ^ ā ž ā ā y ā z ā ' ā ā ā y ' ā ā ē ā q ^ ā ā b \ z ž ā b d ā ā b y ā ā d ā ā y Ÿ \ ā b [a & ž & y z @ d ā y ā \ & ā ' ā y ž b ā ^ ā b ā ž ā ž @ ā ž & ~ ā ^ [ž z ā ā ā ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [a & y [a z ā Ÿ ^ \ y ā z d ā ~ ž @ & ^ b d ā Ÿ ā z ā ā ž d ā ^ ā b ^ ā ž @ y b ž ā y ā [ā ā y] ' ā ā ā y Ÿ b ' | b [ē

Ō y] ' ā ā ā ā z ž ā ' ā ž z ā y ā z ā ' ā ā ā y ā [a y Ÿ b ā ^ ā Ÿ ^ ž Ÿ y ' ā ā ā y ā ^ ā b ā ž @ ā ~ ž @ ā ā b ^ ā z ^ ā y ā [a y Ÿ b ā b ā y b ā y Ÿ \ ā ž ā d ā ^ ā y @ ž y b ž ā ā y a @ ^ ā ā ā ā ā y Ÿ \ ā ' ā ā d ā ~ ā [Ÿ ā ^ ā ^ ā Ÿ y ā ā @ ā ~ ā [ā Ÿ y ā ā ā y @ & ā b ^ ā y ā [a ~ ž @ ā ā ē ā ō y] ' ā ā ā Ÿ ā \ z ž ā ā y Ÿ b ^ ā ā ā ā ā b \ y b ^ ā ā ā b ā y b ā Ÿ \ ā z ā ^ ā z ā \ ā b ā ' ā ā & ž ā b y ā d ā ž & ^ b ^ ā y ā d ā ^ ā ~ ā [ā Ÿ y ā z ' ā Ÿ ^ & a ^ @ b d ā ž & y y @ y ā ā & ž ā b d ā @ ' z y \ ā ž d ā ^ ā ž ā z y ā ā z @ & ž ā b ā { ā ž b ā ž @ ā ā b ž ā b ^ ā y ā d ā ^ ā ā ā \ ā d ā ^ ā y [a y ā ā ā ž ā b ē ā ō y] ' ā ā ā ā y ā ā y ^ ž Ÿ y ' ā ā ā y ā ^ ā b ā ž @ ā ~ ž @ ā ^ ā b ā ā | ^ ā y b ž ā y ā [a u ā | ž ā b [a ~ ^ ā Ÿ [ē ā r y] ^ \ ā ā ž } y & ~ ā ž ā ā ā ā y] ' ā ā ā Ÿ ā \ z z ā y \ b ā y @ ž ā ā b ā ' & b ž z ā b ā ā { ā ~ ~ ā ā d ā y ž y b ' ā ā d ā ^ ā y @ y ā z ' ā ā ā ā ^ ā ž z ā y y ā ' ā b ā ž ā Ÿ ā ā ž } ~ ā \ ā ž ā b ā { ž y b ā ž @ ā ā ^ y ž z ā ā ^ ā @ ž * \ ' ž z ā y ^ ā ā \ & ~ b ^ ā ā ā y ā [ā ā ^ ā z d ā ā * \ ^ @ d ā y ž | ž y ā ž d ā z @ \ ā d ā ^ ā y ā [ā ā \ Ÿ ā b y ā Ÿ ž ā y ā [a y @ \ b y ā ā ^ ā y @ \ ž ā ā b ž y b & ž ā b ā y ā z d ā y ā [a y Ÿ b ' | b [a { ā Ÿ ā ā \ Ÿ ā ž Ÿ b ā y ā [ā ā b \ z ž ā b ā ^ ā b ā ž @ ā ~ ž @ ā ^ ā b ā ā @ ' z y \ ā ž d ā & ž ā b y ā ā b @ ž ā ā d ā ^ ā ā \ ā z \ ž ā ~ ā [ā Ÿ y ā z ā z \ @ y ā Ÿ ž ē

T b \ z ž ā b ā d ā ā b y ā ā d ā y Ÿ \ ā b [a & ž & y z @ ā d ā y ā \ & ā y ž ē ' y ā z ā y ā ā ā b ā ž @ ā ž & ~ ā ^ [ž z ā ā ā ā ā ā n y @ @ ^ ā ā ā u ā | ž ā b [ā ā ā ^ \ ā z ā y ž ā y ž @ b ā b ^ ā ~ ^ ā ā Ÿ ā ž ā ā b \ y b ^ ā ā d ā y Ÿ \ & ā b y ā Ÿ ž ā ā ^ ā ž | ž ā b ā ā { ā Ÿ ā & ' ā ā b ā Ÿ ā \ z z ā ā y] ' ā ā ē

Ō ā ā y] ' ā ā ā ^ ā ~ ā y ā ā ž z ā ā y] ' ā ā ā ā z ' ā Ÿ ^ | ž @ ž z d ā ' ā | ā | ž z ā ā b \ z ž ā b ā ā { ' ā ā y ž ā ' ā ā ^ @ & ž z ā y [ā b ā ž ā z ' ā Ÿ ^ | ž @ ' ā ā ~ ž @ ā ^ ā ā ā b ā ž ā ~ @ ā Ÿ b ^ ā ā y ^ ā b y ' ā ž z ā ' ā ā ā ' ā ā ~ ^ ā Ÿ [a y ā z ā { ' ā ā y ž ā @ ž * \ ' ž z ā b ā z ā z ā y ā ā ā y] ' ā ā ā y Ÿ b ' | b ž ā ā ' & ž z ' y b ž ā [ē ā ā ā ā y] ' ā ā ā y Ÿ b ' | b ž ā ā & \ ā b ā y ž ā @ ž ~ ^ @ b ž z ā ' & & ž z ' y b ž ā [ā b ^ ā b ā ž ā n ž y ā ā ā t b \ z ž ā b ā ā r ā ā Ÿ ž ā y ā z ā b ā ž ā n ' @ ž Ÿ b ^ ā ā ā t b \ z ž ā b ā k \ y b ' | b ž ā ā ^ ā b ^ ā b ā ž ā n ž y ā ā ā t b \ z ž ā b ā ā r ā ā Ÿ ž ā t b y ā ā d ā y Ÿ \ ā b [a & ž & y z @ ā d ā ā b \ z ž ā b ā d ā y ā z ā y ā ā ā b ā ž @ ā ž & ~ ā ^ [ž z ā ā { ā ^ ā ā y ' ā ā b ^ ā y y ' z z ā y [ā b ā ' ā ā ~ ^ ā Ÿ [a & y [a y ž ā ā \ Ÿ ā ž Ÿ b ā b ^ ā u ā | ž @ ā b [a y ā z ē ^ ā ā y b ^ ā y ā ā ^ ā y ā '] y b ^ ā ā z ' ā Ÿ ~ ā ā y @ [a y Ÿ b ^ ā ā y ā z ā & y [a y ž ā ā Ÿ y ā ž ā ā ^ ā y '] ' ā ā y ā z ā y @ ' & ā y ā ~ ž ā y ā b ž ā ā ā y Ÿ y ^ @ z y ā Ÿ ž ā { ' b ā ā ā ž z z @ y ā d ā ā b y b ž d ā y ā z ā & \ ā Ÿ ~ y ā ā y { ā ē

.LDMPK?RGML 9CAFLMJMEW 5MJGAS MJGJ

~^á'Ÿ[DA & \ábAY'ŽA \ ážZA'áAYA & YááŽ@AbáYbAa \ @báŽ@āAbāŽAUá | Ž@ā'b [ĥāA & 'āā' ^áÉ

Łá [AYŸŽžāā^@A \ āŽA^a'āa^@ & Yb'^āAbŽŸāā^á'á [A@Žā^ \ @ŸŽāAbāYbāŸ'āā'ŸbāA { 'bāAbā'āA0āa^@ & Yb'^āAbŽŸāā^á'á [A
Šžā^ \ @ŸŽāAS^á'Ÿ [ĀĀS^á'Ÿ [ĀĀ@ĀĀ0PAS^á'Ÿ [ĀBA^@AYā [A^bāž@AUá | Ž@ā'b [A~^á'Ÿ [A'āā^bAYŸŸŽ~bYŸ'āZAYāZA { 'āāY'ŽA
Ÿ^āā'žž@žZAYA | 'ā'Yb'^āA^Abā'āAS^á'Ÿ [ĒAŁZZ'b'^āYāā [DAYā [AYŸb' | 'b [AbāYbā'ābž@ažž@žāDA'ābžž@ \ ~bāDA
Ÿ^ & ~^@^ & 'āžāDA^@AY^āā'ŸbāA { 'bāAbāžāāYāžAYāžAZā'ŸžābA \ āžA^aA0PASžžā^ \ @ŸŽāA'āā'žž@žZAYA | 'ā'Yb'^āA^aA
bā'āAS^á'Ÿ [ĒA'ā'āAS^á'Ÿ [ĀāāYāāAY~ā [Ab^AYāāAUāž@āA'áŸā \ Z'āāDAŸ \ bā^ābā' & 'bžžAb^DAāb \ žžābāDAžž & ~^á [žžāA
ĀaYŸ \ āb [AYāZAbYaaBDAá \ žābāDAYaa'ā'YbžāDA | žāZ^@āAYāZa'āžž~žāžžābAY^āb@YŸb^@āĒAUāžA^aA0PASžžā^ \ @ŸŽāDA
ž | žāA { āžāAYŸ@žžA^ \ bA^āAYA~@ | Ybžā [A^ { āžžAY^ & ~ \ bžž@AbāYbā'āā^bA & YāYāžžA^@A & Y'ābY'āžžAY [AbāžA
Uá | ž@ā'b [DA'āAá^ | ž@āžžAY [Abā'āAS^á'Ÿ [ĒA'ā'āAS^á'Ÿ [Āā \ ~ž@āžžāAYā [Až] } 'āb'āā~^á'Ÿ žāAYāZa~@^Yžž \ @žāA
bāYbAY@žA'āAY^āā'ŸbA { 'bāAbāžAbž@ & āA^Abā'āAS^á'Ÿ [Ē

..15 : 7548 *

pāŽA~ \ @~^āžA^aAbā'āAS^á'Ÿ [A'āAb^Ažžā \ @žAYāA'āa^@ & Yb'^āAbŽŸāā^á'á [A'āa@Yāb@ \ Ÿb \ @žAbāYbA~@^ & ^bžāAbāžA
ŸYā'ŸA & 'āā' ^āAYāZA~ \ @~^āžA^aAbāžAUá | Ž@ā'b [A'āAbŽŸYā'āāDAžžY@ā'āāDAāžž@ | 'ŸžDA@žāžY@ŸāYāZa
YZ & 'ā'āb@Yb'^āDAYāZAb^Ažžā \ @žAY^ & ~^á'YāžZa { 'bāAYāāAY~ā'ŸYŸāžžAY { āĒA0bAYāāA~@^ | žžāā^b'ŸžDAb^AYāāA { ā^A
 \ āžAYāZA & YāYāžžA0PASžžā^ \ @ŸŽāDA^aAbāžAUá | Ž@ā'b [ĥāAž] } ~žŸYb'^āāAYāZA@žā \ āYb'^āāĒ

...185.7.9 4+ : 8 *

Uāž@āAY@žA@žā~^āā'ŸāžA^@AbāžA~@^bžŸb'^āA^aAUá | ž@ā'b [AYāāžžbāAYāZĥa^@AbāžAYŸŸ \ @YŸ [DA'ābžā@'b [AYāZA
Ÿ^āā'žžāb'Ÿā'b [A^aAbāžA'āa^@ & Yb'^āAb^A { ā'ŸāAbāž [ĀAY | žAYŸŸžžāĒAUāž@āAY@žAž] } ~žŸbžžAb^A \ ~^ā'ā'žAbāžA
ābYāZy@žāAYāZa~@'āŸ~āžāA^aAbāžAUá | ž@ā'b [A { ā'žā \ ā'āāA0PASžžā^ \ @ŸžāĒAŁŸŸ^@ž'āāā [DA \ āž@āAY@žA~@^a'ŸbžžA
a@^ & A \ ā'āāAYā [A~^@b'^āA^aA0PASžžā^ \ @ŸžāAb^A~ābA^@Ab@Yāā & 'bAYā [A'āa^@ & Yb'^āDAŸYbYDAbž] bDAa'āžDAā'āāDA
ā^ab { Y@žDAŸāYbDAŸ^ & \ ā'ŸYb'^āA^@Abāž@AY^ābžābAbāYbā'āāAY@ & a \ āDAYŸ \ ā | žDAZ'āŸ@' & āYb^@ [DA^āb'āžDA
Ÿ^ & ŸYb' | žDAbā@žYbžā'āāDA'āā \ āb'āāDAžž & ŸY@Yāā'āāDAāY@Yāā'āāDA'āb' & žYb'āāDAžžAY & Yb^@ [DA~^@ā'āá@Y~ā'ŸDA
^ŸāŸžāžA^@A { ā'ŸāAāžāYb' | žā [AYāāžŸbābāžAUá | ž@ā'b [DAYā^bāž@AUāž@DA^@AYā [Abā'@ZA~Y@b [ĒAUāž@āA { ā^AZA
ā^Ab@žā~žŸbAbā'āAT~@'bā^aAUāžA & Y [AYžAāžžā'āA | 'ā'Yb'^āA^aAbā'āA0PAS^á'Ÿ [Ē

. ; |) * +.3.9.438

& |) ? R ? ĒA

¡ 541. (> *1&' 47&9.43

&¡ &AACQQÉĀĽŸŸŽāāb^āā^&ŽĀŌpAŠžā\ \ @ŸŽāā'āā@žāb@ŸbžžAb^āā~žŸ'aŸā~āā'b^āā^@A\ ābāYāA
žžbž&'āžžY[AbāžY~@^~@Ÿbžāā\ āŸb^āYā\ ā'baāžYZÉACE\ āŸb^āYā\ ā'baāžYZāāā^ā\ āZAZžbž&'āžā
YāZAY\ bā^@']žābāžY~@^~@Ÿbžāžā@žžA^āYŸŸžāā^ā@žŸYā&ž&Ÿž@A^ābāž@A\ ā'bāDAYāZāāā^ā\ āZā
~@^|žžA\ ā'bā&ž&Ÿžāā { 'bāYZZ* \ Ÿbžā^@žābŸb^āYāZAb@Y'ā'āā@žāY@Z'āābāžY~@^~@Ÿbžā\ āžā
^āYāāŌpAŠžā\ \ @ŸžāÉAŪā'āāŌpAŠžā\ \ @Ÿžā^ā\ bā'žžA^ābāžāāŸ~žA^āYŸŸžāā^ā@YābžžY[Abāžā
Ūā|žžā'b[A^@AYbbž&~b'āāAb^āž}ŸžžA@žāb@Ÿb^āā^ā^āYŸŸžāā^āAYāāž@'^ā\ ā|'āŸb^ā^āAbā'āAS^āŸ[A
YāZā&Y[A~^bžāb'Yāā[AžžYAb^āŸ@' &'āYā~@āžŸ\ b^āÉ

'¡ 9CAFLGA?J?LB (MLRCLR' ?QCB 7CQRPGARGMLQÉĀpāžāŪā'|žžāb[A@žāž@|žābāžā@'āābAb^A
'&~āžAbžŸāāŸŸā@žāb@Ÿb^āā^āAbāžAYŸŸžāāb^ābāāžb { @āā'āā { Y[āAbāYb&Y[AZ'ā@ \ ~bAbāžā
YŸ'āb[A^A\ b'ā']žŸž@bY'āAZž|ŸžāDA~@^ā&Y&āDAYāZā~@b^āŸ^āāÉĀĽZž'b^āYāā[DABāžāŪā'|žžā'b[A
žž]~@žāā[A@žāž@|žābāžā@'āābAb^A'&~āžāŸYābžābÉYāžžA@žāb@Ÿb^āā^āAbāžā\ āžā^ā'bāŌpA
Šžā\ \ @ŸžāÉAT\ Ÿā@žāb@Ÿb^āā&Y[AŸžāžāžāŸY@Ab^A~@bžŸbāžāŪā'|žžā'b[AYāZābā
Ÿ^āāb'b\žābāÉpāžāŪā'|žžā'b[A@žŸ'āā']žābāYbAYŸYžž&'Ÿā@žžž^&AYāZAbāžā@žžž^&A^ā'ā*\ @ [A
Y@žā'&~^bYābA|Yā\žābāYbA&Y[AŸžāāžž@žžāY[AYāA^|žž]žŸā^ā@žžāb@Ÿb^ā^ā^āŸ^ābžābÉ
pāžžā@žžDAYā[AŸ^ābžābÉYāžžA@žāb@Ÿb^āāŸāž&žā'&~āžžA^āŌpAŠžā\ \ @Ÿžā { 'āā@žž*\ @žā
Y~@^~@ŸbžāŪāŸžAS@žāžžābAY\ bā^@']Ÿb^āÉ

(¡ &AACQQ (MBCQÉĀŪāžžā& \ ābAbYāžž~@žŸŸ\ b^āāb^A~@ž|žābA\ āY\ bā^@']žžA\ āžā^ābāž@A
YŸŸžāāŸ^žžāā~Yāā { ^@žābÉAŪāžžāā { 'āāŸžāžāžāYŸŸ^ā\ ābYŸžā^@AYāāYŸb^āā~žžā^@&žžA
\ āžž@Abāž@AYŸŸžāāŸ^žžāDA'āŸā\ Z'āāAbā^āžā~žžā^@&žžāY[A^bāžž@'āž'|Z\ YāāAYāA@žžā\ ābAb^A
āžā'āžāŸžā'ā~@bžŸb'āābāžāŸ^žžāÉ

¡) 5PQT?AWÉĀŪāžžāY@žāŸ'ā'āYbžžAb^A@žā~žŸbAbāžā~@|YŸ[AbāYbAbāžž@AŪāžžāāY|žā'ābāžž@A^ { āA
ā[ābž&āDANŸbYDAYāZAYŸŸ^ā\ ābāÉpā\ āDA'ba'āAY|'āŸb^ā^āAbā'āAS^āŸ[ā^@AYā[AŪāžžAb^AžāāYāžā'āA
žāžŸb^ā'Ÿāāā^~'āāDā^@Ab^āž&~ā^ [AŌpAŠžā\ \ @ŸžāA^@Abāžā~\ @~āžā^āā~@ ['āā'āb^āAbāžāYāY'@ā^ā
^bāžžāDAÉžžDAb^AYŸŸžāā^@AYbbž&~bAb^AYŸŸžāāžāžŸb^ā'Ÿā'āžžā^@Ab^A'āābYāāÉ\ b'ā']žā' &YāžŸY\ Z^A
@žŸ^@Z'āāAZž|ŸžāDA { 'bā^ā\ b~@^~@žAY\ bā^@']Ÿb^āAb^AZ^ā^ā^ā^ā^ā^ā^āžā\ āžāŸ\ ā'āžāā~\ @~āžā^ā^A
bāžāŪā'|žžā'b[É

Ūāžžāāā^ā\ āZAYžAY { Y@žžAbAYbAbāžāŪā'|žžā'b[AŸŸāā^bAā\ Y@YābžžAbāžāžŸ\ @'b[AYāZā~@|YŸ[A^āŌpA
Šžā\ \ @ŸžāDAYābāž@A\ āžžā&Y[Aā^bAYā { Y[āAYžāŸ^&~āžžā[A~@|ŸbžÉACE^@žž]Y&~āžžā'āā\ YāŸžā^āYā
~Yāā { ^@žā^@A^bāž@A&žŸāā^āYŸŸžāā^āAb^AYāā\ @žAY~@^~@ŸbžāŸ^ā'žžāb'Yā'b[A^āŪā'|žžā'b[EA
@žāYbžžā'āā^@&Ÿb^āAYāZā'āžžāÉŌbAZ^žāā^bAá\ Y@Yābžžā~@|YŸ[A'āAYāāYŸžāžāžā~žŸYāā[A^@A
~žžā^āYāA^@āY { a\ ā\ āžā^āŌpAŠžā\ \ @ŸžāÉpāžāŪā'|žžā'b[A&Y[A&^ā'b^āŌpAŠžā\ \ @ŸžāAb^A
žāā\ @žžAbAYbAbāž[AŸ@žāžŸ\ @žžāZAYž'āā\ āžžā'āY^ā^@&'b[A { 'bābā'āŌpAS^āŸ[AYāZAbāžžā
Ūā'|žžā'b[Aá\ 'žžā'āžžāÉpāžāŪā'|žžā'b[DAb^Abāžāž]bžābAYāā { žžāY[AY~@ŸŸŸāžāY { DA@žāž@|žābāžā
@'āābAb^āž}Y&'āžžā\ āžžDAYāZAZ'āŸā^āžāYā[AŸŸbYā^ā\ āžā^āAbāžāŪā'|žžā'b[āŌpAŠžā\ \ @ŸžāAb^A
~\ @~āžžā^ā^ā\ @bāžž@'āābāžāžāžābāDāYāžž[Daz'āŸ'~ā'āžžāžŸ\ @'b[DA^@A~@~@žž[A@'āābAb^AYā[A^bāžž@
Ūāžžā~žžā^āDA^@Ažžāb'b[ÉĀĽā[AŸŸbYAbāYbAbāžāŪā'|žžā'b[AāYbāžž@āA^@&āā\ Ÿā~žž&'āā'Yāžā

Ÿ^ää'äbŽâbA { 'bâAbâŽAUâ | Ž@ã'b [ĤâATŽâã'b' | ŽAÑYbYAÀATŽŸ\@'b [AS^à'Ÿ [DAUSE ÎÉËËÉÉÁP^AbâŽAŽ }bŽâbA
bâŽ@ŽA'âAYâ [A \ áŸŽ@bY'áb [AYâAb^A { âŽbâŽ@AYâ [AÑYbYAŸ^âãb'b \ bŽâATŽâã'b' | ŽAÑYbYDA'baââYââYŽA
b@ŽYbŽZAYâATŽâã'b' | ŽAÑYbYA \ âb'âYAZŽbŽ@ & 'âYb'^âA'âA & YZZÁY [AbâŽANÔRAYâZACE \ áŸb'^âYâAUâ'bA
âŽYZDA'âAY^âã \ âbYb'^âA { 'bâAbâŽAUâ | Ž@ã'b [ĤâARaa'ŸŽA^aOŽáYâAŁ.aaY'@âÉ

+I ; GMJ?RGML MD 1?U

- I 2 ? JGAGMSQ 8MDRU?PCÉAòbA`āAbāŽA@Žā~^āā`Ý`ā`b[A^aAYāāUāŽ@āAb^AbYæŽAY~~@^~@`YbŽA

3i 8?LARGMLQÉACEY'á \ @ŽAb^AYZāžŽAb^AbāžāŽA~^á'Ÿ'ŽāAYāA@Žā \ abA'áAbāžāā \ ā~žāā' ^áA^aAŌPA
Šžā^\ @ŸžāA~@'| 'ážāžāDAZ'āŸ'~á'áY@[AYŸb'^āāAYāZA~^āžŸ\ b'^āA \ ážž@AābYbžAYāZAžžžŸŸYāāY { āA
{ āžāAY~~ā'ŸŸŸāžÉA bāžAUá | ž@ā'b [A & Y [A@žāb@'ŸbA^@Aā \ ā~žāZAUāž@A~@'| 'ážāžā~žāž'ááA
'á | žāb' áYb'^āAYāZāžžž@ & 'áYb'^āA^aAbāžAYāāžāžZA | 'áYb'^āAāBÉAŌāAbāžāž | žābA^aA@žāb@'Ÿb'^āA^@A
ā \ ā~žāā'^āA^aAŌPA Šžā^\ @ŸžāA~@'| 'ážāžāDAYA@žŸā^áYŸāžāžā^@bA { 'āāŸžA & YžžAb^A
YŸŸ^ & ^ZYbžAbāžAYŸžž & ŸAŌPA Šžā^\ @ŸžāAāžžžāA^aAbāžAUāž@AZ \ @'āāAbāžA'ā | žāb' áYb'^āÉA
Uá | ž@ā'b [AāYāŸb'^āāAY@žA' & ~^āžžAY [AbāžAY~~@^~@'YbžAUá' | ž@ā'b [AY \ bā^@'b [AYāZA & Y [A
'áŸā \ žžA@ž' & Ÿ \ @āž & žābAb^AbāžAUá | ž@ā'b [Aa^@AbāžAŌPA Šžā^\ @ŸžāDAāž@ | 'ŸžāAYāZA~ž@ā^āžā
ŸāY@āžā'áŸ \ @žžA'āAZžžŸŸ'āāAYāZA~@^ | 'āAbāžA | 'áYb'^āAYāA { žāAYāA@^ & AbāžA | 'áYb'^āA
'bāžāÉA Šž' & Ÿ \ @āž & žābA & Y [A'áŸā \ žžAY^ & ~žāāYb'^āA^@AābYaaA { ^@āAb' & žA@žāYbžžAb^AbāžA
| 'áYb'^āAYāZAa^@AY'Ÿá' | 'āā'āa^@ & Yb'^āA@žāYbžžAb^AbāžA'áŸ'žžābÉ

4i 3ML^ < ?GTCPEÁL_AaY'á \ @ŽAb^AžāA^@ŸžAYá [A~@^ | 'á'^āA^aAbā'āA~^á'Ÿ [AZ^žāā^bāŸ^āāb' b \ bžAYA { Y | ž@A
^aAāY'ZA~@^ | 'á'^āA^@AYāA' & ~āžžAžāž^@āž & žābA^aAYā [AYŸb' | 'b [AbāYbA { ^ \ áZA^bāž@ { 'āžAY^āā'ŸbA { 'bāA
bā'āA~^áŸ [É

8CLQGRGTC) ?R? ?LB 8CASPGRW 5MJGAW

.i 541. (> 89&9 * 2 * 39

pāžAYŸ'á'b [Ab^AY^āžžŸbAYāZA~@^Ÿžāā'āa^@ & Yb'^āA^@AYZ & 'á'āb@Yb' | žAYāžAYŸžž & ŸA~ \ @~^āžā'āAY@'b'ŸYāAb^A
bāžAUá' | ž@ā'b [āA & 'āā'^āÉAŌāa^@ & Yb'^āA^@āžžŸbžžAYāZA~@^ŸžāāžžA & Y [A'áŸā \ žžA~ž@ā^AYā'āa^@ & Yb'^āA
@žāY@Z'āāAāb \ žžābDAž & ~ā^ [žžāA^@AYá \ & 'āÉAUāžžāA^~ž@Yb'^āA^@A \ b'á'] 'āāŌNUAŸ^ & ~ \ b'āā@žā^\ @ŸžāAY@žA
@žā~^āā'Ÿāžā^@A & YāYá'āāAYāZA & Y'ábY'á'āāAbāžāžŸ \ @'b [A^aAbāžāZYbYDAŸ^ & ~ \ b'āā@žā^\ @ŸžāAYāZA

(I SšZYžA@žAž@Ab^A0āa^& Yb^'āAbžYāā^ā[AŠžā^ \ ŸžāAS^ Ĩ [Aa^@AYāa^bāž@A
Zžā^ b^ āāĚ

. ; I 541. (> * 1& ' 47&9.43

&I +SLARQML?J : LGR 7CQNMLQ@GJGRWÉACE \ aŸb^ āaYāA \ ā^ bAāžYZāAY@žA@žā~^āā ŸāžAā^@A
' & ~āž & žāb^ āāAY~^@~@ ŸbžA & YāYāž@ ŸāDA^~ž@Yb^ āāDA~ā [ā ŸYāDAYāZAbžYāā ŸYāŸ^ āb@^ āāAa^@A
YŸŸZāāAb^DA \ āžA^ aDAb@Yāā & ' āā^ āA^ aDAYāZAZ^ ā~^ āYāA^ aAZYbYā^ āAY^ & ~ā^ YāŸžA { ' bāAbā āAS^ ā Ÿ [ÉAbā āā
@ž* \ @ž & žābā āāžā~žY^ āā [A' & ~^ @bYābAa^ @Abā āžāŸ^ & ~ \ b^ āā@žā^ \ ŸžāAbā YbAā \ ~^ @bA^ @Aā ābā
Ÿ@b^ ŸYāŸ^ \ ā^ āžāāA \ āŸb^ āāA^ @ATžāā^ b' | žAŸYbYĚ

' I 8CLQGRGTC) ?R?ÉAT^ & žAž^ Y & ~āžāA^ aTžāā^ b' | žAŸYbYā^ āŸā \ žžIāā ŸYāāžŸ \ @b [Aā \ & Ÿž@āDA
Z@^ | ž@Aā ŸžāāžāA \ & Ÿž@āDAY@žž^ bAYŸ@Z^ A^ @A^ bāž@Aa^ āYāŸ^ YāAYŸŸ^ \ ābAā \ & Ÿž@āDAŌNUAŌŸNāā \ & Ÿž@āDA
~^ @bžŸbžžAāžYābāA^ āa^ @ & Yb^ āDAbā^ āYāŸ^ YāZyBYDAžž^ ŸYb^ āYāA@žŸ^ @žDA^ ābžāžŸb \ YāA~^ @~ž@b [A^ @A
@žāžY@Ÿā@žŸ^ @žDAZ^ ā^ @A~^ @ā^ žžDA^ @AYā [A^ āa^ @ & Yb^ āAbā YbAY^ \ āZ@žā \ ābA^ āAYa & Ybž@ ŸYā@^ āāA^ aA
' žžāb^ b [Abā žābDAYA | ' ā^ Yb^ āA^ aACEŌSSŁ DAŌŌSSŁ A^ @AŌŌMŁ DA^ @A^ bāž@ { ' āžāāY@ & Abā žāžā^ b' & YbžA
ā^ āYāŸ^ YāYāZāž~ \ bYb^ āYāA^ ābž@žābA^ aAbā žAUā^ | ž@ā^ b [A^ āa^ āY \ bā^ @^] žžAYŸžāā^ āA~ž@ & ' bbžžDA
{ āžbāž@A^ ābžāb^ āYāā [A^ @A \ ā^ ābžāb^ āYāĚ

(I 8CASPc 8RMP?ECÉATžŸ \ @žAāb^ @Yāžā^ āAY | YāŸYāžA^ āAUā^ | ž@ā^ b [A~^ @^ | ' žžāāžb { ^ @āAYbbYŸāžžA
āb^ @YāžIāāžÉāÉDAAREZ@^ | žÁBÉAŁ āāATžāā^ b' | žAŸYbYā^ āAb^ AYžAAb^ @žžAž^ bāž@A^ āAbā žāžb { ^ @āAYbbYŸāžžA
āb^ @YāžA^ @A { ' bā^ āA^ bāž@AY \ bā^ @^] žžA^ āāb^ b \ b^ āYāžāž@ž~^ @^ āžāā [ābž@ & āāžÉāÉDAMYāāž@DAŁ^ Z^ @^ āžYŸāDA
žbŸÉBÉATb^ @YāžA^ āAYASNDāž^ bāž@AUā^ | ž@ā^ b [A^ ā žžA^ @A~ž@ā^ āYā^ āA^ ābAY^ āā^ žž@žžAžŸ \ @žA
 \ āžžāābāžāAY@ZAZ@^ | žA^ āA~^ @~ž@ā [AžāŸ@ [~bžžĚ

) I) MULJM?BGLE ?LB 9P?LQNMPRGLEÉATžāā^ b' | žAŸYbYā^ & Y [Aā^ bAYžAZ^ { āā^ YžžžAb^ @A^ @A
b@Yāā~^ @bžžA^ āAYā [AS^ @bYŸāžATb^ @YāžāžŸ | ŸžAYāZAPžžYÉAbā^ āAY~^ ā^ žāAb^ AY^ bāA^ āÉŸY & ~ \ āā
YāZā^ aāÉŸY & ~ \ āāZ^ { āā^ YZ^ āāAYāZAb^ Yāā~^ @bYb^ āÉAŁ āā^ ābžžA^ āAbā āAS^ ā Ÿ [DAāžŸ \ @žāžb { ^ @ā
YbbYŸāžžAāb^ @Yāžā^ āA~^ @^ | ' žžAa^ @Abā^ āA~^ \ @~^ āžÉATžāā^ b' | žAŸYbYā^ & Y [AYžAZ^ { āā^ YžžžAYāžÉ^ @A
b@Yāā~^ @bžžA^ āā [A { ' bāA~^ @^ @A { @^ bbžāŸ^ āāžābA^ aAbā žAY~^ @~^ @YbžAŸ^ ŸžASžā^ žžābÉAbā^ āAY^ āāžābā
{ ' āāA^ āā [AYžAā^ YābžžA^ āAYAbž@ & ~^ @Y@ [DAŸYāžÉŸ [EAŸYāžAYā^ āĚ

* I : QC MD 2CBG? MP * OSgNKCLRÉAUāž@āAY@žAb^ AYŸžāāAUā^ | ž@ā^ b [A^ āa^ @ & Yb^ āA^ āA
Uā^ | ž@ā^ b [EA^ { āžžA & žž^ YA^ @Až* \ ~ & žābÉAŁ āā^ āa^ @ & Yb^ āāAb^ @žžA^ āAUā^ | ž@ā^ b [A^ { āžžA
ž* \ ~ & žābDA^ āŸā \ Z^ āāAY \ bAā^ ābā^ & ' bžžAb^ ASNDāāž@ | ž@āDAYāZāāžb { ^ @āAYbbYŸāžžAāb^ @YāžDA^ āA
Ÿ^ āā^ žž@žžAbāžA~^ @~ž@b [A^ aAbāžAUā^ | ž@ā^ b [ÉAUāž@āAY@žA^ āAb^ āAāb^ @žDAŸ^ & \ ā^ ŸYbžDAb^ Yāā~^ @bDA
^ @A~^ @ŸžāāAUā^ | ž@ā^ b [A^ āa^ @ & Yb^ āA^ āA~ž@ā^ āYāā [A^ { āžžA & žž^ YDAžž | ŸžāDA^ @AY^ & ~ \ bžž@ā
{ ' bā^ \ bA~^ @^ @A { @^ bbžāAY~^ @^ | YāAa^ @ & Abā žAY~^ @~^ @YbžAŸ^ ŸžASžā^ žžābAYāZAbāžAY~^ @^ | YāA^ aAbāžA
~ž@ā^ āYāž* \ ~ & žābAY [AŌāa^ @ & Yb^ āAbžŸāā^ āā [ATž@ | ŸžāAŌPtbÉAŌāa^ @ & Yb^ āA^ āAUā^ | ž@ā^ b [A
^ { āžžA~^ @bYŸāžAZž | ŸžāAā \ YāAYāAāYāāZ@ | žāDAZ^ āāDA^ @AAY~^ b~^ AY^ & ~ \ bžž@ā & \ ābAYžAāb^ @žžA^ āA
~ā [ā ŸYāā [AāžŸ \ @žA^ āŸYb^ āāAYāZa & \ ābA^ āAb^ AYžAb^ Yāā~^ @bžžA { ' bā^ \ bAžāŸ@ [~b^ āāAbāžAYbYā
 \ ā^ āAUā^ | ž@ā^ b [AY~^ @^ | žžA^ āAb { Y@žAYāZAbžŸāā^ * \ žāĚ

+I * LAPWNRGMLI T^ ab { Y@žDA~^ ā^ ŸžāDAYāZa~^ @Ÿžž \ @žAa^ @AžāŸ@ [~b^ āāATžāā^ b' | žAŸYbYāY@žA
Ÿ \ @žābā [AYž^ āāAZž | žā^ ~žžAYāZAZž~^ ā^ [žžAY [Abā žAUā^ | ž@ā^ b [ÉAŸ \ žAb^ Abā žAāŸ^ ~žA^ aAbā^ āa { ^ @ā
YāZAbā žAYāYāā^ āāāYb \ @žA^ aAbžŸāā^ āā [A^ ā | žāb^ @ [DAbā žAZž~^ ā^ [& žābA^ aAžāŸ@ [~b^ āā^ āAYāā
 āāā^ āāA~^ @ŸžāāĚ

âY&ŽËÿÿää'ááDAÝŽá'bbá'ááDAbâ@ŽYbŽá'ááA|'âŽáÿŽDAâbŽÿá'ááA&^âŽ[DAZZâb@^['ááA~^ââŽâá'^ââDA
'â^âYb'ááDA^@Aÿ^&&'bb'ááAâŽ}\YâA|'âŽáÿŽËÁŠŽáYb'âââ'~A|'âŽáÿŽAÿÿA^ÿÿ\@AÝŽb{ŽŽáAÿÿá\YâA^@A
'âb'&YbŽA~Y@bâŽ@âA^aAbâŽAâY&ŽA^@A^~^â'bŽAâŽ}DAa^@&Ž@A~Y@bâŽ@âDA@^&&YbŽâDA^@AaY&'â[A
&Ž&ÿŽ@âÉ

8R?JIGLE 'âAÿA~YbbŽ@âA^aAb{^A^@A&^@ŽA'áÿ'ZZâbâA^aA\â{YâbŽZAYbbŽâb'^âDAâY@Yââ&ŽâbDAÿ^âbYÿbDA^@A
^bâŽ@Aÿ^âZ\ÿbAZ'@ŽÿbŽZAYbAYââ~Žÿ'a'ÿA~Ž@â^âAbâYbA{^âZAYÿ\âŽA@ŽÿA^âYÿâŽA~Ž@â^ââAb^AaŽY@AâY@&A
b^AbâŽ'@A~â[â'ÿÿâAâŽÿâbâDA&ŽâbYâA^@AŽ&^b'^âYâAâŽÿâbâDAâYâŽb[DAa@'ŽâZâDAaY&'â[A^@A~@^~Ž@b[É
TbYâæ'ááA&Y[A'âÿâ\ZZDAÿ\ba'âAâ^bAâ'&'bZZAb^DAbŽâŽ~â^âŽAÿÿââDAbŽ}bA&ŽââYá'ááDAâ^ÿÿYâAâŽb{^@æ'ááDA
'ââbYâbA&ŽââYá'ááDA&^â'b^@'ááAÿŽâY|^@DAÿŽ'ááA'âA~â[â'ÿÿâA~@^}'&'b[Ab^AbâŽA~Ž@â^âDA^@AbYæ'ááA
~ÿb\@ŽâÉ

8CVS?J - ?P?QQKCLR &ŽÿââAÿá[A\â{Žáÿ^&ŽAâŽ}\YâAYZ|YâÿŽâDA@Ž*\ŽâbâAa^@AâŽ}\YâAaY|^@âDA

āž} \ YāYŸb' | b [ÉAT' & aY@ [DA~Yābāž} \ YāY'āāžābAZ'žāā^b' & ~ā [Aa \ b \ ŽAY'āāžābÉ

(?N?AGRW DMP (MLQCLR

'S ŌāYŸ~YŸ'bYb'^ā'āAZZ'a'āžZAYāYŸ'āā'āAYāAbYbž'ā { ā YāYA~žā^āā \ aa'Ÿžāb [AāYŸāābāžA
Ÿ'āā'b' | žAYŸ'ā'b [Ab^A@žYā']žAbāYbAbāžā'b \ Yb'^ā'āāž} \ YāDA^AŸYāābAY~žŸ'YbžA
Ā@Yb'^āYā [AYāZ@žYā^āYŸā [BAbāžāYb \ žAYāžÉ^Až}bžābA^AbāYbāā'b \ Yb'^āÉ

(S N^āāžābAYāA^ā [AYžAá | žāY [Abā^āžA { 'bāAYŸ~YŸ'b [Ab^AY^āāžābÉA P'ā^ā [^ \ āāž@A
bāYāÉHAZ^A^AbāY | žAbāžAYŸ~YŸ'b [Ab^AY^āāžābAb^Aāž} \ YāAYŸb' | b [ÉACE^AYZ \ ābāDAŸY~YŸ'b [Ab^A
Ÿ'āāžābā'āA^AYāYāžAY [AYŸYāžAYā'āÉA PžābYā [AZ'āYŸāžZA~ž@ā^āāYāZA~ā [ā'ŸYā [A
'āYŸ~YŸ'bYbžZA~ž@ā^āā & Y [A^AbāY | žAbāžAYŸ~YŸ'b [Ab^A^ | žAY^āāžābÉARāžA & Y [AYžA
'āYŸ~YŸ'bYbžZAbž & ~^@Y@'ā [AYāYA@žā \ ābA^A & žābYāā āāžāāDA \ āY^āāY^ \ āāžāāDA^AYāYA
@žā \ ābA^AYāY^ā^ā^A^AbāžAZ@ \ āY^āā \ & ~b'^āÉ

)S RāžA & Y [A^AbāžāYāžA'āāž} \ YāAYŸb' | b [A { 'bāAYābāž@A~ž@ā^ā { āžā^āžAāā { āA^AāYā
@žYā^āYŸāžAYŸ \ āžAb^AYžāž | žAbāYbA~ž@ā^āAb^AYžA'āYŸ~YŸ'bYbžZA \ žAb^AYāY^ā^A^Abāž@A
Z@ \ āAY^āā \ & ~b'^āA^A^Abāž@A@žYā^āāÉA bYāžā'āAY^ābž} bDA^A & žA'āžYŸb^āA^A~āā'YāžA
'āYŸ~YŸ'bYb'^āA & Y [A'āYā \ žZDAY \ bAY@žā^Abāā' & 'bžAb^AbāžA^āā { 'āāI \ & 'b'āāDAā \ @žZA
ā~žžYāDAžžY@žYāžZA & ^b^AAY^A@ž'āYb'^āDA \ āY^āāY^ \ āāžāāDAžž@Yb^Y^A^Až} bž & žAYžāY | ^@DA
āā { āžZāžA^A~ž@ā^āāY^āā \ & ~b'^āDA^AY^A^Ažā^Abāž | žāÉ

(MCPAGML

N^āāžābA { ā'Ÿā'āA^Yb'āžZAbā^ \ āāAbāžA \ āžA^Aa@Y \ ZA^@A^@ŸžDA { āžbāž@AY [A~ā [ā'ŸYāAa^@ŸžDA
bā@žYbāDA'āb' & žYb'^āA^A^AY^Až@Ÿ'āā'ā'ā | YāžÉ

(I &NNJGA?@GJGRW

pā'āA~ā'Ÿ [AY~ā žāAb^AYāāAŌ^āāANY@^āāUā' | ž@'ā'b [Aāb \ žžābāÉA \ āāAb \ žžābāY@žāžāY^ \ YāžžAb^A
@ž~^@bAYāāžāžZA'ābž@~ž@ā^āYā | ^āžāYžA^āāžāāžāAYāA^āā'ŸāžÉA@bž@~ž@ā^āYā | ^āžāYžA
^āāžāāžāA & Y [AYžA@ž~^@bžZA { āžbāž@Abāž [A^AYŸ \ @žZA^āAYŸ & ~ \ āDAYbAYUā' | ž@'ā'b [Aā~ā^ā^žZA
ž | žābDA^A^āAYŸ & ~ \ āā'āYā \ ž'āāAb \ ž [AYŸ^AYZDA'ābž@āā~āDAYāZA' & ž@'ā'āāž}~ž@žāYžāÉ

) I (MLDBGCLRG?JGRW ?LB 7CNMPRGLE

p^AbāžAž} bžābA~āā'ŸāžDAbāžAUA' | ž@'ā'b [A { 'āāA & Y'ābY'āAbāžAY^āā žžāb'Yā'b [A^AYāā~Y@b'žā'ā | ^ā | žZA'āA
YāāžāžZA'ābž@~ž@ā^āYā | ^āžāYžA^āāžāāžāAN^āā žžāb'Yā'b [DA^A { ž | ž@DAYŸā^AbAYžA \ Y@YābžžžÉA
Uāžž@ARā^AāY { DA~ž@ā^āāA { ā^Aāā { AbāYbAYāāž^A [AāYāYžžāAY^A & 'bbžZA & \ āb@ž~^@bAbāYbA
'āA^@ & Yb'^āAb^AāY { Ažāa^@Yž & žābÉACE^AbāYbA@žYā^āDAYāāUā' | ž@'ā'b [Až & ~ā^ [žžāāž} Yā \ ž'āā'ŸžāāžZA
~^@āžāā'āYāAa^A & AbāžAUA' | ž@'ā'b [AN^ \ āāž'āāANžābž@AYāZA~Yāb^@YāY^ \ āāžā^āANW'žžÉA~@žābā
YŸb'āāAYāA~Yāb^@YāY^ \ āāžā^@āXBA & \ ābAY^ & ~ā [A { 'bāAbā'āA~ā'Ÿ [ÉAbāž@žA^@žDAž & ~ā^ [žžāA & \ ābA
Ÿ^ābYŸbAŌ^āāANY@^āāS^ā'ŸžANž~Y@b & žābA^@AbāžAUA' | ž@'ā'b [AŌž'āābāS^ā'ŸžANž~Y@b & žābA { āžāYāA
YāāžāYb'^āA^AYā'ābž@~ž@ā^āYā | ^āžāYžA^āāžāāžāAYāYžžA & YžžÉ

Tb \ žžābāA { ā^Až}~ž@žāYžA'ābž@~ž@ā^āYā | ^āžāYžAYŸāA & žžbA { 'bābāžAS^A^@Y & AN^@Z'āYb^@Aa^@A
bāžAUA' ^āžāYžASž | žāb'^āAYāZAL'Ÿb'^āANžābž@Ab^AZ'āY \ āāAYāā'b \ Yb'^āAY^āā žžāb'Yāā [DA { ā'Ÿā & žYāā
bāYbAbāžAUA' | ž@'ā'b [A { 'āāā^AbA~ \ ā \ žAYāā | žāb'āYb'^āA^AbāžAYŸā'āA^AY^āā žžāb'Yāā^@ & Yb'^āA
āāYžžA { 'bāAbāžAUSLNAŸ^@Z'āYb^@A'AbāžAāb \ žžābAZ'žāā^AbA { 'āAb^AZ^āāÉAbāžAUSLNA
Ÿ^@Z'āYb^@A'āā^AbAYāžāYā [A~@' | āžāžAY^āāZYābDA^Abāž [AY@žAāb'āā@ž* \ 'žžAb^A@ž~^@bAYŸā'ŸāāāÉ
'žžāb'ā'āā'āA^@ & Yb'^āAb^AāY { Ažāa^@Yž & žābAYāZA & YāžA~ž@^Z'ŸA^āāÉ žžāb'ā'āāā \ & & Y@žāA^AbāžA
Ÿ@ & žāAYŸ \ @āā^āAYŸ & ~ \ āAb^AbāžAb' bāžAŌUAY^A@Z'āYb^@É

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ŌāZ' | ž \ YāāA@žŸ'~žābāA^AbāžAYžāY | ^@AYāžÉ^@Abā^āžAYāā'āā'āA@žŸ'~žābāBA { ā^A@ž~^@bA
'āYžžābA^A'ābž@~ž@ā^āYā | ^āžāYžA { ā'ŸāAYŸ \ @A { ā'žāžāžāāžA'āāžāYāžZA'ā \ āžž'YāžA
Z@'āā'āA^@āā'Ÿ' bAZ@ \ ā \ āžA { 'āā^AbAYžAžāZAbžā~āā'ŸāžA^@A | ^āYb'^āAbāžA \ ā | ž@'ā'b [AYāY^A^A
YāžÉ^@AZ@ \ āA~ā'Ÿ [É

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pāŽAUā | Žāb [Aāb@Ÿbā [A~@^ā ŸbāA@ŽbYā'Yb'^āY [DAa^@DA^@AYáY'āābAYā [A~Y@b'Ÿ'~YābAĀŸ^&~āY'āYābDA
@ŽŸ'~ŽābA^aAbāŽAŸŽāY | ^@DAbāŽA@Žā~^āZŽābDA^@A { 'bāŽāāŽāBāa^@A&Yæ'āāAYāá^@ZaY'bāA@Ž~^@bA^aAYā [A
Ÿ^āZ\ŸbDAYŸbDA^@A~@YŸb'ŸŽAYŽā'Ž | ŽŽAb^AYŽā'ābŽ@~Žāā^AYāA | ^āŽāŸŽDAa^@A@Žā'āb'āāā\ŸāYŽāY | ^@DAa^@A
~Y@b'Ÿ'~Yb'āāA'āAYāA'ā | Žāb'āYb'^āA^aAbāŽAYāāŽāYb'^āDAYāZĒ^@Aa^@A~Y@b'Ÿ'~Yb'āā'āAbāŽAŸ^āZ\ŸbA~@^ŸŽāāĒA
S@^ā Ÿ'bŽZAYŽāY | ^@A'āŸā\ZZāAYā [Aa^@&A^aA'āb' &'ZYb'^āDAbā@ŽYbāDA^@AāY@Yāā&ŽābAY [AbāŽA'āZ' | Z\YāA
^@Aa@'ŽāZāDAaY&'ā [DA^@A^bāŽ@A~Ž@ā^āāYŸb'āāA'āAā\~~^@bA^aA^@A^āŸŽāYāaA^aAbāYbA'āZ' | Z\YāĒA
ŠŽbYā'Yb'^āAYYāAYŽA | Ž@ŸYāDA { @'bbŽāDAā@Y~ā'ŸDAŽāŽŸb@^ā'ŸDA^@A~ā [ā'ŸYāĒAĸŸbāA^aA@ŽbYā'Yb'^āAYYāAYŽAŸ [A
bāŽ&āŽā | ŽāDAYY\āŽAa^@AZ'āŸ'~ā'āY@ [AYŸb'^āĒAN^āŸŽ@āāA^aA@ŽbYā'Yb'^āAYYāAYŽA@Ž~^@bŽZAb^AbāŽAb'bāŽAŌŪA
N^^@Z'āYb^@DAŌNUSŃDAbāŽAŪSĽNAN^^@Z'āYb^@DA^@AbāŽAŃŽYāA^aATb\ZZābāĒ

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ĸā [Aāb\ZZābAa^@āZa@Žā~^āā ŸāŽAa^@AYA | ^āYb'^āA^aAbāŽAŌābŽ@~Ž@ā^āYāAŪ'^āŽāŸŽAS^āŸ [A { 'āāAYŽA
ā\ŸāŽŸbAb^AZ'āŸ'~ā'āY@ [AYŸb'^āA\~Ab^DAYāZA'āŸā\Z'āāDAŽ}~\āā'^āĒAT~ŽŸ'a'ŸAY^āZ\ŸbA~@^ŸŽZ\@Žā&Y [A
ŸŽAa^@āZāZ@ŽA**ābb~ĵĒā'bŽāĒāŸ\ĒZZ\ĒZZYāAaāb\ZZābāĒ~YāŽāĒŸ^& \ā b [ĒābYāZY@ZāĒ'ābŽ@~Žā^āYāĒA**
[|'^āŽāŸŽĒ~^āŸ \[ĒAO | ŽāA'aAŌ^āāANŸ@^@āAŪā | Žāā'b \[A&Ž&ŸŽ@āAY@Žāā^bAY@' &'āYāā \[A~@^āŽŸ\ bŽZDAbāŽA](#)
Uā | Ž@ā'b [AYŸA~\@ā\ŽāZ'āŸ'~ā'āY@ [AYŸb'^āĒ

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YÉA pŽääAYAb@ \ äbžžA~ž@ä^äAYÝ^ \ bAbâžAYÿbA^aA' äbž@~ž@ä^äYäA J ' ^äžäÿžÉ
 YÉA S@žžä@ | žAYä [Až | žžäÿžA^aAbâžAYÿbEÄNž~žžä' ää^äAbâžAb [~žA^aA
 ' äbž@~ž@ä^äYäA | ^äžäÿžA^aažžäžDAž | žžäÿžA & Y [A' äÿä \ žžDAY \ bA' äAä^bAä' & 'bžžA
 b^DAbž} bA & žžäYäžäDA | ^ÿžA & Y äA & žžäYäžäDAÿ^Z' ä [Aä \ žžDAžbYÉASä [ä ÿYäA
 ž | žžäÿžAä \ YäAYäYä^bä' ääDAYžžAäžžbäDAžbYÉää^ \ äZAYžA~äYÝžžA' äAYA
 äžÿ \ @žAY@žYÉ
 YÉA N^äbYÿbAbâžAÖ^äâANY@@^ääAS^ä ÿžAñž~Y@b & žäbAYbADÉHEEÄ Î | EÉÐEFAYäZÉ^@A
 bāžAUä | ž@ä' b [AÖž' ääbäAS^ä ÿžAñž~Y@b & žäbAYbADÉHEE Ä Î EÐEÉ Í EÉAYäZÉ^@AbāžA
 ÖNUÄFEä^ \ @AN@' ä' äAÖ^bä' äžAYbADÉHEE Ä Î | ENŁ ÖÖÉÄÖNUSNÄÿYäA~@^ | žžA
 ' & žžYbžA@žžäž@Yä' ää^@ & Yb' äDAÿÿžžäAb^AbâžA \ ä' | žžä' b [AY^ \ ääžä^@A^äEA
 YäaDA' ä | žäb' äYb' | žAYä' äbYäÿžDAYäZAYä' äbYäÿžA { 'bAä^b' a [' ääAä^ÿYäAäY { A
 žäa^@ÿž & žäbAYäžäÿžäÉA bāžAÖNUÄFEä^ \ @Aä^bä' äžAYYäA~@^ | žžA' & žžYbžA
 ä \ ~^@bAYäZAY@' ä' äA' äbž@ | žäb' äDAžž \ YÿbžA@žžY ~ žäbäA^aAbâžAYžäY | ^@A
 YäZÉ^@Aä \ ~^@b | žA^bäž@äAYÝ^ \ bA@ž~^@b' ääA^~b' ääAYäZA & žžÿYäÿY@žDAYäZA
 Y^@Z' äYbžAYäA' äE~ž@ä^äAYZ | ^ÿYÿ [A@žä~^ääžA { äžäAY~@^~@ YbžÉ
 ZÉA TžžäA' & žžYbžA & žžÿYäYbžäb' äAYbAYATŁQOÄTž} \ YäAŁ ääY \ äbAQ \ @äžA

| 'ĤāYŹY [A~@^ | 'Z'āāYA@YāāZĀ@a@Zā~āāZāDA'āYā\Z'āāY@'ā'ā'ābZ@ | Žāb'ĤāDAāYaŽb [A
~āYāā'āāDA@Yāā~^@bYb'ĤāDAŸYĤ&~Yā'ĤāAbĤāāZāāā~'bYāYāZĒ^@AbĀā~ŽYæA { 'bāāY { A
Zāā^ŸZ&ŽābDA@Zā\@ŸZāē'āa^@&Yb'ĤāDAŸZā@ZāZ@YāāĒA T b\ZŽābāYŸāAYŸZāābāZāZā
āZ@ | ŸZāY [AYĤābYŸb'āāAbāZĀUSĽNAS@'ā@Y&AN^@Z'āYb^@Abā@^ĤāābāZĀONUADFEā^\@
N@'ā'āĀŌ^bā'āZAYbADĒHEĒĪ I ENĽŌŌĀĀDDGGBĒ

ŸĒA 7C?QQGELKCLRQĪA ŪāZāAbāZā@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@AYāZAbāZā@Zā~āZāZābA
~Y@b'Ÿ~YbZāA'āAbāZāAY&ZāŸYāāZāBAYāZĒ^@A@Zā'ZĀ'āAbāZāAY&Zā\ā | Ž@ā'b [A@Zā'ZāYŹā
^@AY@Zā'āYā^āZā~@^} ' & 'b [Ab^A^āZāYā^bāZ@ĀĀ'ĒZĒāāY@ZābāZāAY&ZāYbāZāb'YāYŸ'ā'b'ZābDAbāZā
ŸZāYāA^aTb\ZŽābāA { 'āāYĤāā\ābA { 'bāAbāZāY~~@^~@'YbZā'āZ' | Z\Yāā'āA&Yæ'āāYA
ZŽbZ@&'āYb'āA@ZāY@Z'āāYāAYābZ@'āYb' | ŽAYāā'āā&ŽābāZāBĒ

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bāZā\ā | Ž@ā'b [AZāŸ^\@YāZāAbāāZā { ā^AāY | ŽāZ}~Ž@ZāŸZā'ābZ@~Ž@ā'āYāA | 'ĤāZāŸZāb^A@Z~^@bAbāZāZā
'āY'ZŽābāAb^AYĤābĀŌ^āāNY@^āāS^ā'ŸZāNŹ~Y@b&ŽābAYāZāA^ŸYāAāY { AZāā^ŸZ&ŽābĒAŠZŸ~ŽābāA^aAbāZā
ŸZāY | 'Ĥ@āY | ŽābāZā@'āābDAā^ { Ž | Ž@DAā^AbĀā~@^ | ZŽAYābYbZ&ŽābAbāZā'bāZ@ĀONUŠNĀ^@āā^ŸYāAāY { A
Zāā^ŸZ&ŽābĒ

Ľā [Aāb\ZŽābA { ā^A { 'āāZāAb^A@ZŸZ' | Žā&^@Zā'āa^@&Yb'ĤāA^āA@Z~^@b'āāA~@^ŸZāāZāDAŸāZĒ^@A^ŸYb'Yā
@Zā^\@ŸZĒ@ZāZ@Yāā'āa^@&Yb'ĤāAY@ZāZāŸ^\@YāZŽAbĀā'āZĀUSĽNĒUSĽNĀŸYāAYāā^A~@^ | ZŽAbāZā@ZŸ~ŽābA^a
bāZāYŹāY | 'Ĥ@A { 'bāAYāAYZ | ^ŸYbZābā^\āā^\bAbāZāZāb'@ZāZ~^@b'āāA~@^ŸZāāĒA bāZāUSĽNAS@'ā@Y&A
N^@Z'āYb^@AYŸYāYŸZāZŸYāZŽAYbĀĀĒĒHBAĒĪ I EDĒ I GA^@Abā@^ĤāābāZāONUADFEā^\@Aā^bā'āZAYbĀĀĒĒHBAĒĪ I EA
NĽŌŌĀĀDDGGBĒ

Ēē'āāAYāZ~^@bAZāā^AbāZāŸZāāY@'ā [A^Ÿ'ā'YbZābāZā@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@AbĀā~\@ā\ZāZ'āŸ~ā'āY@ [A^@A
Ÿ@&'āYāYāY@āZāĒĀĽābā^\āābāZāA^ŸYāA~^ā'ŸZāYāZā\ā' | Ž@ā'b [A^āā'ŸYāāĀ'āYā\Z'āāĀONUŠNBAāY | Žā
Yāā^Ÿ'ā'āYb'ĤāAbĀā~^@bZŸYbAbāZāŸY&&\ā'b [Aa^@&AbāāZā { ā^AāY | ŽāZāāYāZāZā'āY@' & Žāā^A | 'ĤāZāŸZā
'āYā\Z'āā@ZāYb'Ĥāāā~A | 'ĤāZāŸZāAbYāē'āāDAāZ} \YāāY@Yāā&ŽābDAāZ} \YāAYāāY\ābDAā^āēYāāZāā\Yāā
āZ} \YāYĤābYŸbDAŸZāZāZ} \YāāZ}~ā^bYb'ĤāDAbāZ [AY@ZAYāā^A&'āZā\ā^AbāZā'āZāZāAYāZāZā'@Zā^AbāZā
@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@A { āZāAYZZ@Zāā'āāYā [AYāāZāZā^āāZāāĒA bāZāZāY [AYŹā'āābYāŸZāā'āā
{ ā'YāAbāZāUā | Ž@ā'b [AYāZĒ^@AāY { AZāā^ŸZ&ŽābAYZ'Zā~\@ā\ZāŸāYāZāā { 'bā^\bAbāZāŸYĤ~Z@Yb'Ĥā
AbāZā@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@Ē

bāZā@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@'āā { ZāŸ^&Zāb^AāY | ŽāYA~Zā^āA^aAā'āēāZ@AYā^ā'āā'āYā\Z'āāA
bāZāS@'ā@Y&AN^@Z'āYb^@Aa@^&AbāZāU'ĤāZāŸZāS@Z | Žāb'ĤāAYāZāĽYb'ĤāANZābZ@A { 'bāAbāZ&A { āZāā
&ZŽb'āāA { 'bāAYāA^āā'ŸZ@Ab^Aa'āZāY@Z~^@bĒĀĽZ'ā'āYāā [DAbāZāNāZ | ŽāYāZāSŸ~ZAN@'ā'āANZābZāAāYā
YĀDFEā^\@AēYŸZēb^EēYŸZāĽZ | ^ŸYŸ [A~@^ā@Y&AbĀā~@^ | ZŽāā\~^@bAYāZā'āa^@&Yb'ĤāAbĀāZā
@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@AYbAbāZā~^ā'ŸZāZ~Y@b&ŽābAā^ŸYāA&\ā'Ÿ~ā'Yā'b [AYāZĒ^@AONUŠNĒĒA bāZā
@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@AYŸYāAYŸŸZāāYZ | ^ŸYŸ [A~@^ā@Y&ābā@^\āāUSĽN'āDFEā^\@Aā^bā'āZā
YbĀĀĒĒHBAĒĪ I ENĽŌŌĀĀDDGGBĒ

ĒĒA+GJGLE ? PCNMPR UGRF /MFL (?PPMJJ 5MJGAC) CNRI 'Ľfi!~!\$~fiĽ!ZŸ%

bāZā@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@'āāāb@'āāā [AZāŸ^\@YāZŽAbĀā'āZāYA@Z~^@bA { 'bāAONUŠNĒDA
{ ā^A { 'āāYĤāZ\ŸbAYā'ā | Žāb'āYb'ĤāĒAObā'ābāZāāZāZ@YāA~@YŸb'ŸZāA^aONUŠNAb^A@Z~^@bA
YāāZāYb'ĤāāA^ā'ābZ@~Zā^āYāA | 'ĤāZāŸZāb^AbāZāUā | Ž@ā'b [AŌZ'āābāS^ā'ŸZā
NŹ~Y@b&ŽābĒAŠZŸ~^@bāAY@ZAYāā^A^@ { Y@ZŽAbĀAbāZāNŸYāA^aTb\ZŽābāRāā'ŸZāYāZābāZā
b'bāZāŌŪAN^@Z'āYb^@A\~^āA@ZŸZ~bĒ

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N@&'āYāYāY@āZāH&Y [AYZā~\@ā\ZŽAYābZ@Aa'ā'āāYāā'ā'b'YāA@Z~^@bA { 'bāUŌSŒĒĒA^āāA
NY@^āāS^ā'ŸZāNŹ~Y@b&ŽābAYāZĒ^@AYāAYZ | ^ŸYbZā&Y [AYŸŸ^&~Yā [AbāZā@ZŸ~ŽābA^a
bāZāYŹāY | 'Ĥ@'āā'ā'āāAY@Z~^@bAYbAUŌSŒĒĒAAbāZā@ZŸ~ŽābA^aAbāZāYŹāY | 'Ĥ@'āā
'ābZēZābZā'āYĤāāZā'āāZāZ@ | ŸZāDAēāZā { 'āāYZāZāZ@ZŽAbĀAbāZāŌ^āāNY@^āāA
Uā | Ž@ā'b [AN^ĤāZā'āāANZābZāĀĀĒĒHBAĒĪ I EFDĪ €BDANāZ | ŽāYāZāSŸ~ZAN@'ā'āANZābZ@A
ĀĒĒĒHBAĒĪ EĒĒĪ ĒBDAYāZĒ^@AN^&Zāb'YāU'ĤāZāŸZāYāZāNā'āZāĽZ | ^ŸYŸ [ANZābZ@ĀĀĒĒHBAĒĪ ĒĒA
ŌŌŌSBĒ

fi +GJGLE ? PCNMPR UGRF RFC 9GRJC . = (MMPBGL?RMP °Łfi!~†\$"~fižž\$"%

pāžA@žŸ'~žābA^AbāžAŸžāY|'^@AYŸāA&žžbA{ 'bāAbāžA b' bāžAÜAN^^Z'āYb^@Ab^AZ'āŸ\āāA
~^āā'ŸāžA|'^iYb'^āāA^AbāžA0ābž@~ž@ā^āYāAÜ'^āžāŸžAS^iŸ[DA { ā Ÿā'āŸā \žžāA@žāYb'^āāā'~A
|^āžāŸžDAābYāæ'āāDAāž}\YāāY@Yāā&žābDAāž}\YāAYāāY\ābDAā^āEŸ^āāžāā \Yāāž}\YāA
Ÿ^ābYŸbDAYāZAāž}\YāAZ}~ā^bYb'^āÉ

(i 8RSBCLR (MLBSAR 5PMACBSPCQ

pāžATb\žžābAN^žžA^aAN^āZ\ŸbAYāZAN^āZ\ŸbAS@^Ÿžž\@žāAY@žāŸ^ābY'āžžA'āAbāžAN^&& \ā'b[ATbYāZY@ZāA
PYā\YāA { ā ŸāAYŸāAYžAa^\āZA^āā'āžAYbA**ābb-ĭĕĕā bžāĕāŸ\ĕžž\ĕžžYā^aāb\žžābāĕ-ŸāžāĕŸ^A&& \ā'b[ĕA**
ābYāZY@ZāĕŸ^āZ\Ÿbĕā[ābž&Aĭ ^|^'āæ@^ā'āā'
āžA^Ÿ\&'bžA bž@ĕPāb~ŸžAEŸb'b~Ÿb'b~žŸ'~āā'

8RSBCLR 7GEFRQ% 9FC 7CQNMLBCLR

0āAbāŽāžY@'āāAā^b'a'ŸYb'^āAbžbbž@AYāZAYáY'āAYbAbāŽāYŽá'āā'āā^aAbāŽāāžY@'āāDAbāŽā@Žā~^āZžābāāb\ZžābA { 'āāA
YžAYZ|'āžžAbāYbAāāāŽāāYāAbāŽā@'āābāāā'ābžžYā^ { ÉA T b \ ZžābāA { 'bāAYā [A* \ žāb'^āāAYŸ^ \ bAbāž'@A@'āābāAY@ŽA
žāY^ \ @YāžžAb^AY^ābYŸbAbāžAŁāā^Y'YbžANžYāA^aTb \ ZžābāÉ

ÉÉA pāžAāb \ ZžābA'āAžāb'bažžAb^AYžAá | žāAYāž } ~āYāYb'^āA^aAbāžāY^āZ \ Ÿbāā [ābž & AYāZAbāžāYāY@āžāāBÉ

ĐÉA pāžAāb \ ZžābA'āAžāb'bažžAb^Aa@žžž^ & Aa^& AāY@Yāā & žābA^@A@žYā'Yb'^āAY [A^bāž@āA'ā | žžA'āAbāžA
ā'b \ Yb'^āÉ

€ÉA pāžAāb \ ZžābA'āAžāb'bažžAb^AbāžA \ āžA^aAYāāY | Y'āYŸāž'ābž@āYāYāZāž } bžāYāā \ ~-^@bAāž@ | ŸžāA'āA
žžYā'āāA { 'bāAbāžāYabž@ & YbA^aAbāžA'āY'žžābÉ

FÉA pāžAāb \ ZžābA'āAžāb'bažžAb^A^YāžžYbAb^AYa & žž & Yž@A^aAYATb \ ZžābAN^āZ \ ŸbAM^Y@ZaA^@A@žYā'āāA^a
^aā'ŸYā^@A~ž@ā^āYāŸ^āā'ŸbA^aA'ābž@žābÉ

GÉA pāžAāb \ ZžābA'āAžāb'bažžAb^AAY | žAYāYz | ā^@A^aAā'āāžž@AYā^ā'āāAYŸY^ & ~Yā [Aāž@Éā' & A
bā^ \ āā^ \ bAbāžāY^āZ \ ŸbA~@^Yžžāā'āYā \ Z'āāAYā [A'ā'YāA & žžb'āāDāY^āāž@žāYžDAbāžA

HÉA pāžAāb \ ZžābA'āAžāb'bažžAb^AYžA~@žāžābAbā^ \ āā^ \ bAbāžāžāžY@'āāDāY \ bAā^bAZ \ @'āāAbāžāžžā'Ÿž@Yb'^āā
^aAbāžATb \ ZžābAN^āZ \ ŸbAŁZ & 'ā'āb@Yb^@ÉM^Y@žÉ

IÉA pāžAāb \ ZžābA'āAžāb'bažžAb^Aāā^ { AYāā'āa^@ & Yb'^āA~@žāžābžžAYāY'āābāā' & āāž@AYāZAb^A | ž { A~ž@b'āžāb
& Ybž@Yāāā \ ~-^@b'āāAbāžāYŸYāžAYā'āābāā' & āāž@É

ÍÉA pāžAāb \ ZžābA'āAžāb'bažžAb^A~@žāžābA~ž@b'āžābA'āa^@ & Yb'^āAYāZAbāžA'āa^@ & Yb'^āA^aA { 'bāžāāžāD
ž } Ÿā \ Z'āāAYāY@YŸbž@A { 'bāžāāžāDAb^Aā \ ŸābYāb'Ybžāā'āāžž@AYāžAYāZAb^A@žā~^āZAb^AbāžāYāY@āžāA

YāY'āābāā' & āāž@ÉA pā'āā'āYā \ ZžāA~@^~^ā'āāA* \ žāb'^āāAb^AYžAYāāžžA^aAbāžA@žžY'~žābA^aAbāžA
YžāY | ^@AYāžÉ^@A { 'bāžāāžāÉ

ĪÉA pāžAāb \ ZžābA'āAžāb'bažžAb^Aa@žžž^ & Aa^& AāY | āāA'@žžž | YābA~ž@ā^āYāā'āb^@ [AZ'āY \ āāžžA^@
Ÿ^āāžž@žžAZ \ @'āāAbāžāY^āZ \ ŸbA~@^YžžāāÉA pāžATb \ ZžābAN^āZ \ ŸbAŁZ & 'ā'āb@Yb^@A { 'āāZžž@ & āžA
@žāž | YāYžÉB

ÈÉÉA pāžAāb \ ZžābA'āAžāb'bažžAb^A@žž & Y'āāā'āžābāā'ÉžÉDAā^bAb^Aā' | žā'āa^@ & Yb'^āAYāY'āābāā' & āāž@āžābB' \ b
& \ ābāYžā'āa^@ & žžAbāYbAbāžāYŸYāžA { 'āāAYžāžžY'žžžA^āAbāžA'āa^@ & Yb'^āA~@žāžābžžÉ

ÈÈÉA pāžAāb \ ZžābA'āAžāb'bažžAb^A { 'bbžāAZ^Y \ & žābYb'^āA^aAbāžA'ābY^ & žA^aAbāžāY^āZ \ ŸbāāžY@'āāÉ

ÈĐÉA pāžAāb \ ZžābA'āAžāb'bažžAb^A & YāžžAYa { @'bbžāAY~žYāA^aAbāžA Z'āY'~ā'āY@ [AZžY'ā'āA { 'bā'āA' | žAĀGB
Y \ ā'āžāāZAY [āA^aAbāžAZYbžA^aAā^b'a'ŸYb'^āA^aAbāYbAZžY'ā'āāÉA Uā' | žžāb [AZ'āY'~ā'āY@ [AYŸb'^āāAY@žA

Y~žYāžžAb^AbāžANžYāA^aTb \ ZžābāÉ

pāžA@žY'~žābA^aAbāžāYžāY | ^@AYāZAbāžA@žā~^āžžābāāb \ ZžābāāAYāāYžA'āa^@ & žžDA'āA { @'b'āāDA^aAbāžA
a^āā^ { 'āāī

- M bāžA^ \ bY^ & žA^aAbāžāY^āZ \ ŸbāāžY@'āāī
- M bāžA~@^Yžž \ @žžAa^@AbāžAY~žYāāA~@^Yžžāī
- M Yā [AYāYāāžA'āAbāžA@žā \ ābāAbāYbA^YŸ \ @āA~@'^@Ab^AbāžAb' & žAbāžA@žā \ ābāAYžY^ & žA'āYāī
- M { āžāAbāžA@žā \ ābāAYžY^ & žA'āYāÉ

)I &BBGRGML?J 7CQMSPAC .LDMPK?RGML

4FGM : GARG KQ MD (PGKC (MKNCLQ?RGML%

(MKNJWGLE UGRF RP?DDGA QGELQ% Úžá ĽžžáY@žAb^AÝžA^~ž@YbžžÉ~Y@žžA^áAÝY&~\áá'áAÝ^&~\á'áAÝžA
{ 'báAYáAb@Yaa'ÝAÝ^áAb@^áAZž | Ýžžáéá'áááéAŇ'á^Ýž | 'ááAbážA'ááAb@ \Yb'^áA^áAYAb@Yaa'ÝAÝ^áAb@^áAZž | ÝžA'áAYA
| '^áYb'^áA^AbážA \ á | žžá'b[A~^á'Ý[AÝáZAá \ÝážYbAb^AYAa'ážA^aAÁ€GÉÉÉÉ

7CQRPGRCB PM?BU?WQ% Š^YZ { Y[áA^áAÝY&~\áá&Y[AÝžAZžá'ááYbžžAÝ[AbážA~^áá'áA^aAY~@^~@YbžžA
á'áááA^@A^ážÉ { Y[Ab@Yaa'ÝÉAR~ž@Yb'ááAYA | žžá'ÝžA'áAbážA^~~^á'á'áAZž@žYb'^áAbáYáAZžá'ááYbžžA'áAYA
| '^áYb'^áA^aA \ á | žžá'b[A~^á'Ý[AÝáZAá \ÝážYbAb^AYAa'ážA^aAÁ€GÉÉÉÉ

&@?LBMLCB TCFGAJGQ% Áá^áE@žá'žžá'YáAb \ žžá'AbDAaYÝ \ áb[DAAbYaaBAÓaA[^ \ A & \ áAbážY | žA[^ \ @AÝY@A
^ | žžá'ááAbDA~ážYážA^á'á[AŇONUSŇAYbADÉHE€I | EÉ€FÉASY@æ'ááA'áAZž}ÝžžááA^aA | ĐAá^ \ @á'áAYA | '^áYb'^áA^aA
 \ á | žžá'b[A~^á'Ý[ÉAAbážAZ@ | žžA^aYA | A'á^~ž@YÝžA | žžá'ÝžA & \ áAbá^b'a[AŇONUSŇA^AbážA^AÝYb'^áA^AbážA
 | žžá'ÝžDAáYb \ žžA^AbážA~@^Aýž & AYáZAá^ { Aá^ááAbážA | žžá'ÝžA'áAZž}~žYbžžAb^AYžA'á^~ž@YÝážÉ

5&70.3 ,

Tb \ žžá'AbáY@žAž}~žYbžžAb^AYžAY { Y@žA^aAYáZAa^áá^ { A~Y@æ'ááA@ \ ážžáé@žá \ áYb'^ááéá'ááYážAYáZA
á~žY'YáAYáá^ \ ážž & žžá'AbDAY | Y'áYÝžA^áAbážAŇONUSŇA^SY@æ'ááA { žžá'bžA
[ább~iféa'bžžáé\ÉžžÉ~Y@æ'ááéA](#)YáZA~ \ ýá'Ý | žžAbá@ \ ááAZÉ & Y'áYáZAáážžAŇONUAÝ^ & & \ á'ÝYb'^ááé

: LGTCPQGRW - CGEFRQ 5MJGAC) CN?PRKCLR

Uá | žžá'b[AŇŽ'ááAbáAS^á'ÝžAŇž~Y@b & žžá'AbAŮŇBAáž@ | žžAbážAUá' | žžá'b[AŇŽ'ááAbáAÝ^ & & \ á'b[DA^aA
{ á'ÝAŇŮ^ááANY@^ááA'áAYA~Y@bÉAŮŇNAžžá^@ÝžžáAYáAbYbžžáY { áAYáZAY'b[A^@Z'áYážžA^@AbážAáYážb[A^aA
ž | žž@ | Ý^Z[A'áAbážAÝ^ & & \ á'b[ÉAŮŇNA & ^á'b^@áAYáZA@žžá~^ážžAb^AÍÉÉAYÝááÉAŮŇNA'ááAÝYbžžAYbA
Đ€ÉFAÚY@žžáá | ážžANžž@Š^YZDAYáZAá^áéž & žžá'žžáY[AÝÝááA^@AYÝááA^@A'áá@ & Yb'^áA & Y[AÝžA
Z@žžYbžžAb^AbážAZž~Y@b & žžá'AbAYbADÉHEÍ€ĐEÉÍÉÉÉ

ŮŇŇA@ž* \ žžá'AbáYbAáB \ žžá'AbáYžY'áá' | YáAb^AbážAaYÝbAbáYbAbY & ~ž@'ááA { 'báA^@A@ž & ^ | 'ááAN'b[A
áB@žžbAáY & žžá'áááAYážÉ@Ab@Yaa'ÝAÝ^áAb@^áAá'áááAÁ Tb^~DAÚ'žžAZAžbYÉBA'áAYAY@' & 'áYáA^aažžážÉAÚ'áYb^@áA
{ 'ááAYžA~@^ážY \ bžžÉ

CE \ @báž@DAbážA^áá^ { 'ááA^@Z'áYážžáAY@žžá'áBžžAa^@A[^ \ @A'áa@ & Yb'^áÉAAbážžA^@Z'áYážžáDAžžá^@ÝžžAÝ[A
ŮŇŇDAY@žžAbážA & ^áBAA@ž* \ žžá'b[A | '^áYbžžÉ

: LGTCPQGRW - CGEFRQ 4PBG?LAC žžłł" S^á'ýbáA \ ážA^aAZžžYb@^á'ÝA { 'žžážžáAZž | Ýžžá { á'áAZ@ | 'ááDA
{ 'báAYAAÉÉÉÉÉÉAa'ážA^@A & ^žžA^@AYZZ'b'^áYáA^aažžážžéAT' & 'áY@A^@Z'áYážžáAY@žžá'áAZžžYbA'áATáYæžžA
Ňž'ááBáDAMžžYá { ^^ZDAT^ \ bA@O \ ýá'ZAYáZA & Yá[A^bážžA@A \ @@ \ áZ'ááAY^ & & \ á'b'žžé

ŁZZ'b'^áYáá[DAZ@' | žžá'ááá^ \ áZAYžAY { Y@žA^AbážA~@^á'Ýb'^áA^@A | žžá'ÝžžAb^Ab \ @áA^'ááBAA | žžá'AbA^Ab^A
NY@^ááAM^ \ áž | Y@žAa@^ & AT^ \ bAÝ^ \ áZAMžžá | ^'@AM^ \ áž | Y@ZAYžb { žžáA | IÉÉAYÉ & ÉAYáZAHÍÉÉA~É & ÉA
{ žžžæZY [áÉAá'á'áAáB@'Ýbá[Ažžá^@ÝžžA { 'báA'ážžá^aAÁÉÉÉÉÉÉÉ

&JJ LGEFR N?PIGLE NPMFG@GRCB | Q^A~Y@æ'ááA^áAÝ'b[AáB@žžbAÝžb { žžá'ADÍÉÉAYÉ & ÉAYáZAGÍÉÉAYÉ & É

* KCPECLAW 8LMU ' ?Li Q^A~Y@æ'ááA^áAÝ'b[AáB@žžbA { ážžááá^ { Ažž}ÝžžžAAb { ^AÁĐBA'áYážžéANÝááA

+0PC 1?LCQI SY@æ'áá'āā~@^ā'ý'bžžā'āA] ^āžāA { āž@žAYāa'@žāYāžā'āā~^ābžžÉ

4DD (?KNSQ 'CF?TGMP 5MJGAW

pāžAUā' | žā'ā'b [A@žāž@ | žābāžā@' áābā^A@ž | ž { Aāb \žžābA & 'āý^āž \ ýbābāYbA^ýý \ @āā^āāýý & ~ \ āā { āžāā
ā \ ýāāýžāý | ^@A@žāžāýbāā \ ~^āābāžā' ābžā' b [A^āābāžāUā' | žā'ā'b [ÉA T b \ žžābāY@žāž & 'āžžābāYbābāž [A
āž@ | žAYāA@ž~@žāžābYb' | žāā^āA^āāNY@^āāUā' | žā'ā'b [AYāZAY^bā~^ā'b' | žAYāZā' āý~@^~@Ybžā
ýžāý | ^@AYāāžýbābāžāUā' | žā'ā'b [āā' & YāžAYāZā@ž~ \ bYb' ^āÉA T b \ žžābāY@žāžāý^ \ @Yāžžāb^āýžā' ā | ^ā | žžā
'āābāž' @AY^ & & \ ā'b [A^ā~^ā'b' | žā { Y [āDAā \ ýāYāY^ & & \ ā'b [Aāž@ | ýžāYāZā^āýýāā^ | žā'ā & žābEāpāžā
Uā' | žā'ā'b [AZžā' @žābā^āY | žāāb \ žžābāYýbYāY^bāA@žā~^āā' ýāžāYāZā & Yb \ @žā@ž~@žāžābYb' | žāÉ

ŌāAbāžāYāZā^āā' āý~@^~@Ybžāýžāý | ^@A^āāýý~ \ ādābāžāNžYā^āA T b \ žžābāA^@AZžā' āāžžā
'ā | žāb' āýbžābāžāžāýāý@āžāYāZā & Y [A & Yāžāžāžāž@Yāāb^ābāžā T b \ žžābāN^āž \ ýbA T [ābž & É
Ā T b \ žžābāA^@^āYā'] Yb' ^āāāā \ āžā@žā~^āā' ýāžā^@A | ^āYb' āābāžāžā@žā \ āYb' ^āāā { āāýžāā \ ýāžýbābā
bāžāāý & žāāýāýb' ^āāā' & ~^āžžāA^@A | ^āYb' ^āābāYbA^ýý \ @A^āýý & ~ \ āBÉ

Łāāā^āYāāāb \ žžābāA & ^ | žā' āb^ābāž' @Aāž { A@žā' žžāýžāDābāž [AY@žāžāý^ \ @Yāžžāb^āžž | žā^~āYā@Y~^~bā
{ 'bābāž' @Aāž { Aāž' āāý^ ^āE A U ~^āāY@' | YāDAāb \ žžābāāā^ \ āZā' āb^āZ \ ýžābāž & āžā | žāDāž } ýāYāāžā
bžāž~ā^āžÉýžāā~ā^āžāā \ & ýž@āDAYāZā & žžāA { 'bābāž' @AY^ & & \ ā'b [A~žž@āā^āYāý^@Z' YāýYā' āā^ābāYbA
bāž [AYýā' žžāb' a [A { 'bābāž' @Aāž { Aāž' āāý^ ^āYāāYýžāYāZā~žā^āYā' b' žāA@Ybāž@ābāYā & žžā [AYāYā
YZZ@žāÉ

8RSBCLR (MLBSAR *VNCAR?RGMLQ

ŁāāābYbžžāYý^ | žDAāb \ žžābāY@žāž' ~žýbžžāb^āžž & ^āāb@Ybžā@žā~žýbāā^@AYāāA & ž & ýž@āā^ābāžā
ā^ýýāāý^ & & \ ā'b [A@žāY@žāžāā^ābāž' @A~āYýžā^āA@žā' žžāýžÉāCEY' ā \ @žāb^āYžāž@žāb^ābāžāā^ { 'āā
ā \ žžā' āžāYýā@žā \ ābā' āAZ' āý' ~ā' āY@ [AYýb' ^āÉ
ÉĀTā^ { A@žā~žýbāā^@AbāžāY@žYā { āž@žā [^ \ āā' | žÉA T' āāā^āZ' ā@žā~žýbā' āýā \ žžDāý \ bAY@žāā^bāā' & 'bžž
b^āā' bbž@' āāāā' bž@' āāāžžāb@ \ ýb' ^āā^āā~@^~ž@b [ĪAb@žā~Yāā' āāā~ \ ýā' ýā \ @' āYb' ^āāā \ ž' b [Īā
'āā \ āb' āāYāā \ YāžĪAYāZā' āāžāYā~Y@æ' āāÉ
ĐĒAR~ž@Ybžāžāžýb^ā' ýāžž' ýžāāābž@žāāDāb | āāžbýÉBAYbA@žYā^āYýāžāž | žāāžā~žý' Yāā [ĪāYbžāYb
ā' āābAYāžžY@ā [A' ābāžā & ^@' āāÉ
€ĒA P Y' āb Y' āYāA^@žž@ [A@žā' žžāýžÉA O | žžāýžā^āAYAZ' ā^@žž@ā [A@žā' žžāýžāýYā' āýā \ žžābāž
ā^āā { 'āāāā^ \ āžā~Y@b' žāā | ^āYb' ^āā^āYāý^ā^āYāZAZ@ \ āāY { āā~ \ ýā' ýā' āb^ } ýýb' ^āāā
ž' ýžāā | žāā' āžāāY@Yāā & žāāā^@A^ābāž@AZ' ā@žāY@Zāā^@Abāžā' 'āābāA^ābāž@āÉ
FĒARā' ^āY { A~@^ā' ý' bāā~žāYāý^ā^āY^āb' ýž@ā' āā~ \ ýā' ýā~āYýžāÉAS \ ýā' ýā~āYýžāY@žābāāž
{ ā' ýāYā [^āžāýYāžābž@A@žžā [AYāZā' āýā \ žžāā' žž { YāāDāāb@žžāDāb@žžāY { āāDāā^ & žā
^ \ bž^@AY@žYā^āY~Y@b & žābAY^ & ~āž } žāDāYāZā' āā' žžā~Y@æžžā^@A & ^ | 'āāYý@āÉ

4TCP?JJ , SGBGLE 5PGLAGNJCQ

ÉÉAQŽ'ááY^@āAāY|ŽAY@'áābAb^AbāŽA~ŽYŸŽa\āŽāā^[] & ŽābA^aAbāŽ'@A~@^~Ž@b [É
ĐÉA T b \ ZŽābāAā' | 'áá'āAbāŽāŽāāŽ'ááY^@ā^ZāAāY|ŽAYāA^Yá'áYb^āAb^A@Žā~ŽYbAbāŽāŽA@'áābā
YāZAb^AŽāā^ [AbāŽAYŽāŽa'bāA^aAā' | 'áá'āAbāŽA { 'ZŽ@AY^& & \ā'b [É
€ÉA0^āāNY@@^āāUAá | Ž@ā'b [AāYāAYAZ \ b [Ab^A { ^@āA~@^YŸb' | Žā [A { 'bāAbāŽAY^& & \ā'b'Žāā \ @@^ \ āZ'áā
bāŽAUá' | Ž@ā'b [Ab^AYāā'ābAb \ ZŽābā'āAbāŽ'@Ab@Yāā'b^āAb^AY^& & \ā'b [Aā' | 'ááÉ
FÉA Ū āŽāY~@^~@^YbŽAYāZA~^āā'YāŽDAbāŽAUá' | Ž@ā'b [Aāā^ \ āZA'ābŽ@ | ŽāŽāā { 'abā [Ab^A@Žā^ā | ŽA'āā \ Žā
YāZA~@^YāŽ&āAY \ āŽZAY [Aāb \ ZŽābāÉ
GÉAŁ āāŽ'ááY^@āDA'āYā \ Z'āāY \ ā'āŽāāŽāDAYā \ @YāŽāDAYāZāYāZā^@ZāDAYāA^YāāYá^@YbŽAb^AY@ŽYbŽ
YāZAā \ ābY'āāŽ'ááY^@ā^ZāŽā | 'ā'ā & ŽābābāYbAY@ŽAāYāŽAYāZāŽāā^ [YŸāŽAa^@AYāāÉ

4DDGAG?J (MKKSLGA?RGML

p { ^A^aa'ŸYā&ŽYāāA^aY^& & \ā'ŸYb'^āAŽ } 'ābAa@^&AbāŽAUá' | Ž@ā'b [Ab^Aa \ āāEb' & ŽA \ āŽŽā@YZ \ YbŽDA
ā@YZ \ YbŽDAYāZA~Y@Eb' & ŽAāb \ ZŽābāĪ

CE^@AYāāAb \ ZŽābāDAŽYŸāAāb \ ZŽāb'āAUá' | Ž@ā'b [A'āā \ ŽZAŽE & YāAYŸY^ \ ābÉ

CE^@A@Žā'ZŽābAāb \ ZŽābāDAŽYŸāAāb \ ZŽābāAYāā'āāŽZ^āAYŸY & ~ \ āA & Y'āY^ } ā'āAbāŽAŃÉAÓÉA
Ō^ & ŸY@Z^ATb \ ZŽābANŽābŽ@ÉACE^@AYāāA^bāŽ@Aāb \ ZŽābāDAŽYŸāAāb \ ZŽābāAY \ @@ŽābA & Y'ā'āā
YZZ@ŽāāÉ

8RSBCLRQ ?PC CVNCARCB RM AFCAI RFCGP QR?LB?PB K?GJ ?LB / (: C~K?GJ ?AAMSLRQ ML ? B?GJWA
@?QGQi < FGJC QRSBCLRQ K?W K?GLR?GL ?LW LSK@CP MD C~K?GJ ?AAMSLRQ UGRF MRFCP QCPTGACQ_A
CTCPW QRSBCLR GQ PCOSGPCB RM K?GLR?GL ?L ?ARGTC / (: C~K?GJ ?AAMSLR ?LB SQC GR DMPA
CJCARPMLGA AMK KSLGA?RGML PCJ?RCB RM : LGTCPQGRW @SQGLCQQi 9FGQ PCOSGPCKCLR NPMTGBCQA
PC?QML?@JC ?QSP?LAC RF?R RFC QCLBCP MP PCAGNGCLR MD CJCARPMLGA KCQQ?ECQ K?RAFCQ FGQ MP FCPA
RPSC GBCLRGRWI

5MQRGLE 5MJGAW ?LB 5PMACBSPCQ

ÓŽáŽŸYá~^á'Ÿ[A* \ Žáb^ááAŸYáAYŽAZ' @ŽŸbŽZAb^AbáŽáŸN' @ŽŸb^@A^aAS \ @ŸáYá'ááAÁk \ } 'á'Y@ [ATŽ@ | ŸŽáAYbA
ĐÉHÉÉÍ | É€ÉĐGÉAN^ábŽábAYáZA * \ Žáb^ááAŽáY@Z'ááA~^áb'ááAŸ [Aáb \ ŽŽábáAYáZAá^áEUá' | Ž@áb' [Aá@^ \ ~á
áá^ \ áZAYŽAZ' @ŽŸbŽZAb^AbáŽARaa' ŸŽA^aATb \ ŽŽábAŁ Ÿb' | b' ŽáAYbAĐÉHÉÉÍ | ÉĐÍ | A^@A
[áb \ ŽŽábYŸb' | b' Žá L áŸ \ ÉŽ \](#)

, :.) * 1.3 * 8 + 47 85 * (.+. (9 > 5 * 8 4 + 5 : ' 1. (.9 >

897. : 2 < .3) 4 < 5 & .39.3 ,

ÉÉA Łb@' \ & A { 'áz^ { A~Y'áb'ááA'áAbáŽáŸNÉAÓÉAÓ^ & ŸY@Z^ATb \ ŽŽábANžábŽ@A'áA@ŽáŽ@ | ŽZAa^@A & Yá^@DA
ŸY&~ \ áE { 'ŽŽáŽ | ŽábAa^@A@ONUŽáb' b' ŽáA^áá [ÉARáá [A^áŽáŽ | ŽábA & Y [AYŽA~ \ Yá'Ÿ'] ŽZAYbA^áŽA
b' & ŽÉ
ĐÉA PáŽAá@^ \ ~A & \ ába~@^ | 'ŽŽAbáŽ' @A^ { áA~Y'ábAÁ \ áŽA { YbŽ@AYáŽZA~^ábŽ@A~Y'ábA^áá [A~áŽYáŽÉĐÉA
SY'ábA & \ ábAYŽ@Ž & ^ | ŽZA { 'bá'áADFáá^ \ @áA^AbáŽáŽ | ŽábÉ
ÉÉA ÓAbáŽAYáŽYá'ááAY^ & ~Yá [AYáŽYááAbáŽA { 'áz^ { DA [^ \ @A^ @áYá'] Yb' ^ áA^ @AZŽ~Y@b & ŽábA { 'ááAYŽA
YáY@áŽZAYaAZŽAbáYbA@YááŽáAa@^ & ÁÉÉÉÉAEAFÉÉÉ
FÉA P^AáŽba~Ž@ & 'áá' ^ áAa^@Abá' áAa^@ & A^aA~ \ Yá'Ÿ' b' [DA~áŽYáŽAY^ & ~áŽbŽAbáŽARaa' ŸŽA^aATb \ ŽŽábA
Ł Ÿb' | b' ŽáAS \ Yá'Ÿ' b' [AŠŽ* \ ŽábACE^@ & DA { 'báAbáŽáŽá' bAYáZAZŽá' ááAYbbYŸáŽZDAYáZAá \ Y & 'bAb^AbáŽA
Raa' ŸŽA^aATb \ ŽŽábAŁ Ÿb' | b' ŽáAARTŁBAa^@AY~@^ | YáÉ
GÉA ŁábŽ@A [^ \ @A@Ž* \ ŽábA'áAY~@^ | ŽZDA [^ \ A & Y [Aá'ááAbáŽAYb@' \ & A { 'áz^ { AYŸáŽáZY@Aá^ŸYbŽŽA' áAbáŽA
RTŁÉ

' & 33 * 78

ÉÉA MYááŽ@áA & Y [A^áá [AYŽAá \ ááA^áAbáŽA { YááA^AbáŽAŁb@' \ & AYŸ@^ááAa@^ & AbáŽA { 'áz^ { áA^aAbáŽ
ŸÉAÓÉAÓ^ & ŸY@Z^ATb \ ŽŽábANžábŽ@AYáZAa^@A^ & AbáŽAá^@'] ^ábYá@Y'áAYbAbáŽAb~^A^aAbáŽáAbž~áÉAT' áááA
& Y [Aá^bAYŽAá \ ááA^áAYá [A^báŽ@A { YááA^@AábY'@ { Y [AáYáZ@Y'áÉ
ĐÉA MYááŽ@áA & Y [AYŽAá \ ááAa^@AYA~Ž@' ^AZA^a^áŽA { ŽŽÉÉAbáŽ [A { 'ááAYŽA@Ž & ^ | ŽZAYabž@AáŽ | ŽáAZY [áA
^@Aa^áá^ { 'ááAbáŽAZY [A^AYáAYZ | Ž@b' áŽŽAZ | ŽábÉ
ÉÉA MYááŽ@áA & Y [Aá^bAŽ'] ŽŽZAbá@ŽŽAÁÉBAAŽŽbA { 'ŽŽAY [Aá'] ÁÁHBAAŽŽbAá^ááA' áAá'] ŽAYáZAáá^ \ áZAYŽA
á \ ááAYbAYááŽ' ááAbA^aAYbAáŽYábAŽ' ááAbAŽŽbAa@^ & AbáŽAáá^@É
FÉA O'ŸŽ~b' ^ááA & Y [AYŽA & YŽŽA' áAbáŽAá'] ŽĐAá^ŸYb' ^áAYáZAáYáá' ááAZ \ @Yb' ^áA^aAá' ááAa^@Aá~ŽŸYáA
ŸY&~ \ ááŽ | ŽábAÁŽÉáÉAÓ^ & ŽŸ^ & 'ááÉACEY & á [A ŸŽŽéŽáZDAÓ@ŽŽéA ŸŽŽéDAŽb'ÉBA { 'bAbáŽA
Y~@^ | YáA^aAbáŽARTŁÉ
GÉA Tb \ ŽŽábA^@áYá'] Yb' ^ááA { 'áAbA^~^ábAYŽ [^áZAbáŽAá \ 'ŽŽá' áŽáA { @'bbŽáA' áAbá' áA~^á'Ÿ [DA & \ ába
á \ Y & 'bAYA { @'bbŽáA@Ž* \ ŽábAb^AbáŽARTŁAa^@AY~@^ | YáÉ
HÉA Uá' | Ž@áb' [AZŽ~Y@b & ŽábáA { á^A { 'áAbA^~^ábAYŽ [^áZAbáŽAá \ 'ŽŽá' áŽáA { @'bbŽáA' áAbá' áA~^á'Ÿ [A & \ ába
áŽbAbáŽAY~@^ | YáA^aAbáŽARaa' ŸŽA^aATb \ } 'á'Y@ [ATŽ@ | ŸŽáÉ
IÉA ŁááAYááŽ@áAY@ŽAY~@^ | ŽZAYáZAábY & ~ŽŽAa^@AY~@^ | YáDA' áŸ' \ Z' ááAYA@Ž & ^ | YáZAYbŽDÁY [AbáŽA
RTŁAÁá^ŸYbŽŽA' áAT \ b' ŽAĐÉÉA^aAbáŽAŸÉAÓÉAÓ^ & ŸY@Z^ATb \ ŽŽábANžábŽ@DAYŸ' | ŽAbáŽAY^ááAb^@ŽBÉ

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ÉÉA Pá'áAa^@ & A^aA~ \ Yá'Ÿ' b' [A'áAY | Y'áYáŽAa^@A@Žá' ábŽ@ŽZAáb \ ŽŽábAa@^ \ ~áA^@AZŽ~Y@b & ŽábAbA^~@^ & ^bŽA
YáA^@áYá'] Yb' ^áYáŽ | ŽábA^@A & ŽŽb' ááÉ
ĐÉA NáYáé' ááAÁá^ \ áZAYŽA^áAbáŽAá' ŽŽ { YáéA^áá [AYáZAá^bA^áAYá [AY' \ 'áZ' ááA^@Ab@YááAYááÉ
ÉÉA Ó@^ \ ~áA & \ ába~@^ | 'ŽŽAbáŽ' @A^ { áAYáYáéÉ
FÉA P^AáŽba~Ž@ & 'áá' ^ áAa^@Abá' áAa^@ & A^aA~ \ Yá'Ÿ' b' [DA~áŽYáŽAY^ & ~áŽbŽAbáŽARaa' ŸŽA^aATb \ ŽŽábA
Ł Ÿb' | b' ŽáAS \ Yá'Ÿ' b' [AŠŽ* \ ŽábACE^@ & DA { 'báAbáŽáŽá' @ŽŽAbž' } bDAYáZAá^ŸYb' ^áAYbbYŸáŽZDA

* 3+47 (* 2 * 39

ÉÁ pāŽARTŁAābYaaA { 'āāA & ^ā'b^@AYāZA & Y'ābY'āAbāŽAY \ āāŽb'āAY^Y@ZāDAZ^@āDAYāZA { 'āZ^ { āA'āAbāŽA
 Tb \ ŽŽābNŽābŽ@AYāZAYāA^aaAZybŽZA^@A \ āY~@^ | ŽZAāā Ž@āA^@AYYāāŽ@āH^āYA { ŽŽāā [AYYā'āÉ
 ĐÁ pāŽARTŁAābYaaA { 'āāA & ^ā'b^@AYāZA & Y'ābY'āAbāŽAY \ āāŽb'āAY^Y@ZāDAZ^@āDAYāZA { 'āZ^ { āA^āAbāŽA
 ŃÉÁŌÉÁŌ^ & Y@Z^ATb \ ŽŽābNŽābŽ@A^āAY'É { ŽŽāā [AYYā'āÉ
 €Á pāŽAŁ \ } 'āY@ [ATŽ@ | YžāAYāZĀŌ^ \ āžæŽž~'āāZž~Y@b & ŽābāA { 'āāA & ^ā'b^@A \ āY \ bā^@ ']žZA
 ~āb'āāāA'āAYZ & 'ā'āb@Yb' | ŽY^ & & ^āY \ 'āZ'āāāZ } Yž~bA { āž@žAā^bžZAY' | ŽÉ
 FÁ CÉY' \ ab [DAābYaaDAYāZāāb \ ŽŽābāY@ŽāŽāY' \ @YāžZAb^AbYæžAZ^ { āZybžZAāā Ž@āAYāZAY' @'āā
 \ āY~@^ | ŽZA^@A * \ Žāb'āāY'āZāā Ž@āAb^AbāŽAYbbŽāb'āā^āAbāŽARTŁAābYaaAYāāžžžžžÉAbāŽA^aa'YžZA
 ābYaaA { 'āāA^āā^ { A \ ~A { 'bāAYā [AāYāYb'āāābāYbAY@žAāžžžžžA^@A~ā'Y [A | 'āYb'āāÉ

7 * 8.) * 3 (* 1.+ *

Ō'j'āāA^āAYY & ~\āā'āAY@žā'ZžāYžāYāāA'āHAY \ ā * \ ŽAYāZA { ^āžž@a \ āāž } ~ž@'žāYžDAYAY'YbYā [ābAa^@A
 ~ž@ā^āYāA^@^ { bāYāZā'āžž~žāžžāYžÉŌbA~@^ | ŽžāA'āā \ & Ž@Y'āZā^~@b \ ā'b'žāAb^Aā' | ŽA { 'bāA^bāž@āA { ā^A
 Y@žAZ'āāž@žābAa^ & A [^ \ @āžāDAb^AYžY^ & ŽAYāžžžž@DAb^AY^ & & \ ā'Y'YbžA { ŽāDAb^A & YāYāžāY'āāā'YbāA
 ā \ Yžžāā \ āā [DAb^A & YæžāA^ \ āZAZžY'ā'āāDAYāZAb^AY@^YžžāA [^ \ @A~ž@ā~žYb' | ŽA^āAbāŽA { ^@āžÉ

ŪžA'ā | 'bžA [^ \ Ab^Až & Y@YžžAbāžā~@'bA^aY^ & & \ ā'b [DAbYæžāA^ & žA@'āæāA { 'āā'āāā [DA & žžbA [^ \ @AYāYāāžāāžāA
 YāZA@žā~^āā'Y'ā'b'žāAā^āžābā [DAžžY@āAa^ & A [^ \ @A & 'ābYæžāAā \ & Yā [DAYāZā@žā~žYbA [^ \ @āžāaDA [^ \ @A
 āž'āāY^@āDA [^ \ @AY^ & & \ ā'b [DAYāZA [^ \ @Ažā | 'āā & žābAžāž@āžb'Y'Yā [É

Łābā^ \ āāAbāžAŪā' | Ž@ā'b [AāYāāžžbāābYāZY@ZāA^aYžāY | ^@Aa^@AYāāAāb \ ŽžābāDAā^ & žAYZZ'b'āYāAá \ Žžā'āžāA
 Y@žAāžYžāāY@ [Aa^@Abā^āZA { ā^Aā' | ŽAb^āžbāž@A'āAbāžA@žā'žžāYžāYāāāÉAN \ @'āāAY^ & & \ ā'b [A & žžb'āāāA [^ \ A
 { 'āāAbYāāAY' \ bāā^ { Až | ž@ [^ \ āžAY'āāā^ { AžY'āA^bāž@A@žā~žYbÉACE^@A * \ žāb'āāā^@AY^ & & žābāDA~āžYāžA
 Y^ābY'YbAbāžARaa'YžA^aSžā'žžāYžāŌ'āZAYbAāĐÉHBAÉ I ÉFFÉ Í DA@žā'āž L āY \ Éžž \ DAYāžÉ^@A | 'ā'bA^ \ @A { žYā'bžA
 YbIAābb~IÉā'bžāÉāY \ Éžž \ É@žā'āžÉ

&RFJCRGA COSGNKCLR &Y[A^a^bAYZ\ aZZA' aAbZ@Z'a'Zz'aYzAaYaaA^@A' & &ZZ'YbZa[AYZaYyZ'aAb^A@Z'a'Zz'aYzA
aYaaAZ^^@aAYaZA { 'aZ^ { aEAb'a'a'ay\ Zz'aY\ bA' aAa^bAa' & 'bZZAb^IAaYbZAY^Y@ZaiA@^aaZ@AYaYZZaiAYY@^aaZa
YaZAa^YaeZ[AZ* \~&ZabIAa^aaAYaZAyYaZyYaaAZ* \~&ZabIAYYaZbYaaDAy^ { a'aaAYYaaDAa^bYyaaDA@ \aY[A
YyaaDAa^YyZ@AYYaaDA | ^aaZ[AyYaaDAbZaa'aAYyaaAyaZA@Yy* \ZbAYyaaDAa@ 'aYZZaDAyAZaA^bZ@aEakbaZbYyA
Z* \~&ZabA&Y[A^aa[AyZAb^@ZZA'aA@Z'a'Zz'aYzAaYaaA^@& aDAYaZA'aAa^bA~Z@& 'bbZZA'aAaYaa { Y[aDAy^& &^aA
Y@ZyaaDA@Zab@^^& aDAZbYÉ

'GICQ Y@ZaA^bA~Z@& 'bbZZA'aAa^ \aaZaA^@AAbY@ { ZaaEAbaz@ZAY@ZaA^AAb^@YaZaAYy'a'b'ZaAY|Y'aYyaaZaA^@AY'aeZaA

Ú a ž a Y ž Y á ' á á A ā b Y a a A ^ @ A b ā ž A & Y ' ā b ž a Y ā Y ž A ā b Y a a B A Y @ ž A ' ā A Y A @ ž ā b @ ^ ^ & A b ^ A Y ž Y ā A ^ @ A & Y æ ž A @ ž ~ Y ' @ ā D A b ā ž A
ž ā b @ Y ā Y ž A { ' ā ā Y ž A Y ž ā ^ ā ž ž A Y ā ž A Y ā ^ Y æ ž ž A ^ @ @ ^ ~ ž ž A ^ a a E A O b A ' ā A & Y ā ž Y b ^ @ [A b ā Y b A ā b \ ž ž ā b ā \ ā ž A Y ā ^ b ā ž @ A
@ ž ā b @ ^ ^ & A ž \ @ ' ā ā A b ā Y b ā b ' & ž É A b ā ž A \ ā ' | ž @ ā ' b [A @ ž ā ž @ | ž ā b ā ž A @ ' ā ā b A b ^ A b Y æ ž ž A ž ' ā Y ~ ā ' ā Y @ [A Y Y b ^ ā A Y á Y ' ā ā b A Y ā [A
ā b \ ž ž ā b A { ā ^ A | ^ ā Y b ž ā A b ā ' ā A ~ ^ ā Y [É

(MK KML ?PC? QN?AC

.+ >4 : (&3349 1 * &; * >4 : 7 7442 ' * (& : 8 * 4+ .39* 38* - * &9 47 8240 * , 9&0 *
9 - * +4114 <.3 , 89* 58%

ÉÉÁ SàYŸŽAYAb^ { ŽāYbAbāŽāYāŽā^AbāŽāZ^Ab^~@Ž | ŽābAā & ^æŽAa^ & AY^ & 'ááA' ab^AbāŽA@^ & É
ĐÉÁ ÓYááAYāāŽŽbA^ \ bA^AbāŽA@^ & A { 'āZ^ { Ab^A' āZ'YbŽAbāYbA [^ \ AY@ŽAbāŽ@ŽÉ
ĚÉÁ NYāāĐÉHE€Ī | EÉĐ€FAb^A' | ŽAÓNUSŇA [^ \ @A^AYb' ^āÉ

Ě'ŽAZ@'āāAY@ŽAY^āZ\ YbŽZA' āHŽYāA@Žā' ZŽāYŽAaYāāŽYāAāŽ & ŽābŽ@ÉACEY'ā' āāAb^AŽ | YŸ \ YbŽAbāŽAY' 'āZ'āáA
Z \ @' āáAYāAYāY@ & A { 'āā@Žā \ ābA' āAZ'āY'~ā'āY@ [AYŸb' ^āÉ

pāŽAUA' | Žā'b [AŌŽ'āābāACE'ŽA PY@āāYāā' āā~ŽŸbāŽYāUA' | Žā'b [AY' \ āZ'āáA^āAY@Žā \ āY@AāYāŽZ \ āŽÉpāŽA
Ě'ŽA PY@āāYāā & Y [AŽābŽ@AYā [A@^ & A { 'bā \ bā^b' a' YŸb' ^āAb^AZŽbŽ@ & 'āŽA' a' bā' āA' āA' | ^āYb' ^āA^Aa' @ŽA'YāŽb [A
~^ā'Y'ŽāÉ

NY \ ā'āáAYaYāāŽAYāY@ & A Y [A' āZ \ YŽA~Yā' YAYāZAYŸ@ [AāŽ | Ž@ŽAY^āāŽ* \ ŽāYŽāÉACEYāāŽAYāY@ & āAY@ŽYbŽAYāA
Žā | ^ā & ŽābA { āŽ@ŽAāb \ ZŽābāA^AbŽāA' āá^@ŽAbāŽAYāY@ & AYāā \ & 'āāAbāŽ@ŽA' āā^āZYāāŽ@ÉAŌáā^' āāAYāA
YāY@ & A Y [AYŸ \ āŽAāb \ ZŽābāAb^AYŽŸ^ & ŽA' āā \ @ŽZDA^ | Ž@Y^ & ŽAY [Aā & ^æŽDA^Ab^Aā^āŽAbāŽ' @A' | ŽāÉ
pāŽ@Žā^@ŽDAbāŽAUA' | Žā'b [AbYæŽāAbāŽAYŸb' ^āāA^AbY & ~Ž@'āáA { 'bāA@ŽAYāY@ & āDAā & ^æŽAZŽbŽŸb^@āDA
ā~@'āāāŽ@āDAYāZA@'ŽAŽ' } b'āá \ āāŽ@āA { ā'YāAb@'āāŽ@AYāAY@ & A | Ž@ [AāŽ@' ^ \ āā [É

pāŽAa^āā { 'āáA { 'āāYŽAY^āā' ZŽ@ŽZAYāAā \ aa'Y'ŽābAYŸ \ āŽAa^@A' & ŽZ'YbŽA'ābŽ@' & Aā \ ā~Žāā' ^āAa@^ & AbāŽA
Uā' | Žā'b [A~ŽāZ'āáAYAY^āZ \ YbAāŽY@'āāĪ

ÉÉÁ ŌābŽāb' ^āYāā [AāŽbb' āáAYAa' ŽA^aAYā [AāYb \ @ŽÉ
ĐÉÁ S \ āā'āáAYAa' @ŽAYāY@ & A { āžāA^āZYāāŽ@A' āA~@ŽāŽābÉ

pāŽAa^āā { 'āáA { 'āāYŽAY^āā' ZŽ@ŽZAā \ aa'Y'ŽābAYŸ \ āžAa^@A' & ŽZ'YbŽA@Ž & ^ | YāAa@^ & AbāŽA@Žā' ZŽāYŽAāYāāA
~ŽāZ'āáAYāāŽY@'āāĪ

ÉÉÁ P'ā \ āžA^aAa' @ŽAŽ' } b'āá \ 'āāž@āÉ
ĐÉÁ pY & ~Ž@'āáA { 'bāAbāŽA~@^bŽŸb' | Žā^A^ZA^āAa' @ŽAYāY@ & A~ \ āāAbYb' ^āāÉ
ĚÉÁ ŠŽ & ^ | 'āáAYŸbbŽ@' ŽāAa@^ & AYA@^ & Aā & ^æŽAZŽbŽŸb^@É

, ?K@JGLE 'āA~@^ā'Y'bŽZĪ

, SCQRQĪ OāY^@b'āáA [^ \ @A \ ŽābāA' āAbāŽAāYāā { Y [āDAYŸbā@^ & āDAYāZā^ \ 'āáŽāA' āA [^ \ @A@Žā~^āā'Y'ā' b [ÉA
pā'āā'āYā \ ZŽāA@Žā' ZŽābāA^AbāŽ@AY' \ 'Z'āāāA { ā^AY@ŽA | 'ā' b'āáA [^ \ ÉAŌ \ ŽābāA^aA@Žā' ZŽābāAŽZā' āŽZAYāA
bā^āŽA { ā^AY@ŽA^AbAYā^YŸ \ ~YābA^AbāŽA@^ & BAY@ŽA~Ž@ & 'bbŽZAb^AbY [A^ | Ž@ā' āābAY \ bAY@ŽA^Abā~Ž@ & 'bbŽZA
b^AābY [A & ^@ŽAbāYāAb { ^AY^āāŽŸ \ b' | ŽAā' āābāBā' āAbāŽA@Žā' ZŽāYŽAāYāāA~@^ | 'ZZZAbāŽA \ ŽābA' āA^AbāŽAāY & ŽA
āŽ' AYāAbāŽAā' āb' āāA@Žā' ZŽābÉA.R GQ GKNMPR?LR RF?R RFC PGEFR MD ? PMMK K?RC RM NPQT?AWA
QSNCPQCBCQ RFC PGEFR MD RFC PMMK K?RC RM F?TC ESCQRQ GL RFC PMMKĪ Ù^ \ AY@ŽA@Ž & āŽZAbāYbA
[^ \ AY@ŽA@Žā~^āā'YāŽAa^@AbāŽAYŸb' ^āāA^Aa [^ \ @A \ ŽābāAYāZA { 'āāYŽAāŽāZAYŸŸ^ \ ābYŸāŽA^AYā [AZY & YāŽāDA
ā^āāA^aA~@^~Ž@b [DA^AYŽāY | ^AbāYbA' āA' ā' b' YbŽZAY [A [^ \ @A \ ŽābāÉAŪ^ \ Aāā^ \ āZAYŸŸ^ & ~Yā [A [^ \ @A \ ŽābāA
YbAYāāb' & ŽāA { ā'āŽA^āAYŸ & ~ \ āÉ

; ?A?LAGCQ & Y[A^Y^Y^@AZ\ @'áAbáŽA [ŽY@ÉA0aA [^AY@ŽAáZab { 'báAYA | Y^YáY [A' áA [^@A^& DA [^AY@ŽA Ž}~ŽYbŽZAb^A { ŽáY^& ŽAYaáŽ { A^& & YbŽÉAbá^áŽAa\ áZAb^AYŽAZ'á@Žá~ŽYba \ áAb^A@Žá ŽZáAbááŽZæ'ááAYA @^& AYáYááZDA' áA^@ZZ@Ab^AZ' áá \ YZZAbáŽ & DA & Y[A^Y^Y^áY@áZZAa^@AYAY \ [^bAYáZááŽáAbá@^ \ áAbáŽA Tb \ ŽZáAbAN^áZ \ YbAT [ábŽ&É

< C?NMLQ Y@ŽAá^bA~Ž@ & 'bbŽZÉAUáŽA^@A~^ááŽáá^'áA^Aa^@ŽY@ & áDAY & & \ á'b'^áDAŽ}~á^á' | ŽáDAZYááŽ^ \ á^ ÁAŽ & 'YááDAæá' | ŽáAbáYbAZ^Aá^bA & ŽZbAá~ŽY' a' 'Yb' á^áA^@A { ŽY~^ááA^aAYá [Aæ'áZAY@ŽAa^@Y'ZZZá^' áA Uá | Ž@á'b [A@Žá ŽZáYŽáÉACE^@AYZZ'b'^áYáA' áa^@ & Yb'^áDAáŽZAbáŽACE'@ŽY@ & áAYáZA ÚŽY~^ááAS^á'Y [AYbA ább~IÉÉá'bŽáÉáY \ ÉZZ \ ÉZZYá^aáb \ ŽZáAbáÉ~YáŽáÉY^& & \ á'b [ÉábYáZY@ZáÉ'@ŽY@ & áEYáZÉ { ŽY~^ááAÉ

< GLBMUQ & Y[Aá^bAYŽA \ áZZAb^AŽáBŽ@A^@AŽ} 'bAYAY \ 'áZ' ááAŽ}YŽ~bA' áAbáŽAYáŽA^aAYáAŽ & Ž@áŽáY [É

: LGTCPQGRW 5MJGAW ?LB 5PMACBSPCQ MLA 8CVS?J - ?P?QQKCLR

Tb \ ŽZáAbáA { á^AYáŽ'Ž | ŽAbáŽ [AaY | ŽAYŽZáA@ŽY'~ŽáAbá^aAáŽ} \ YáAaY@Yáá & ŽáBAY [AaY^ \ áb [A^@AábYaa & Ž & YŽ@áDAáá^ \ áZA@ZaŽ@Ab^AbáŽAÓ \ & YáAŠŽá^ \ @YŽáA { ŽYá'bŽAYba
[ább~IÉÉ { ŽY & ŽZ YÉáY \ ÉZZ \ Éá@Éa'áŽáÉÉÉÉÉÉÉÉÉÉ } \ YáÉÓY@Yáá & ŽáBES^á'Y \[É~ZaA](#)
a^@AYAZZbY'áZZAŽ}~áYáYb'^áA^aAbáŽA~^á'Y [AYáZA~@^YZZ \ @ŽáAb^Aa^áá^ { Aa^@A@Žá^á \ b'^áAb^AbáŽA & YbbŽ@É

Tb \ ŽZáAbáA { á^AYáŽ'Ž | ŽAbáŽ [AaY | ŽAYŽZáA@ŽY'~ŽáAbá^aAáŽ} \ YáAaY@Yáá & ŽáBAY [A^báŽ@Aáb \ ŽZáAbááá^ \ áZA & YæŽAYa@Ž~^@bA { 'báA^ááANy@^ááAS^á'YŽANŽ~Y@b & ŽáBÉATZ} \ YáAaY@Yáá & ŽáBAY [AYAáb \ ŽZáAbá'áA Y^áá'ZZŽZAYa | ^áYb'^áA^aAbáŽATb \ ŽZáAbAN^AZAYáZA' áAZZá' áZZAY [AbáŽAÓábŽ@~Ž@á^áYáAÚ'^áŽáYŽAS^á'Y [AYba
[ább~IÉÉá'bŽáÉáY \ ÉZZ \ ÉZZYá^aáb \ ŽZáAbáÉ~YáŽáÉY^& & \ á'b \[ÉábYáZY@ZáÉ'ábŽ@~Ž@á^áYáE | ^áŽáYŽE~^á'Y \[AÉ](#)

8KMIGLE 5MJGAW

Ó^ááANy@^ááAUá' | Ž@á'b [A' áAY^& & 'bbŽZAb^A~@^ | 'Z' ááAYaáŽYábá [DAY^& a^@bY^áŽDAYáZA~@^Z \ Yb' | ŽA Žá | '^á & ŽáBaa^@AbáŽáAb \ ŽZáAbáDAaY^ \ áb [DAYáZáAbYaaDAY^áB@Y^Yb^@áDA | ŽáZ^@áDAYáZA | 'á'b^@áA^aAbá'áA Y^Y & ~ \ áÉA^páŽ@Žá^@ŽDAá & ^æ'ááA' áa~@^á'Y'bŽZA' áAYááAY \ 'áZ' áááA^áA \ á' | Ž@á'b [A~@Ž & 'áZáÉpáŽ@ŽAY@ŽAá^A ŽZá' ááYbŽZAA & ^æ'ááAY@ŽYáA' áAYá [A \ á' | Ž@á'b [A~@ŽYbŽZAY \ 'áZ' áááÉAOY^áAY \ 'áZ' áááAYáA^áZáŽáB@YáYŽA ŽZá' ááYbŽZAYáA & ^æŽÉa@ŽZÉAT & ^æ'ááA { 'bá' áAGÉAaZZbA^aAbáŽA & Y' áAŽáB@YáYŽáA^a@Žá'ZZáYŽáYááAYáZA { 'bá' áADGAb^AGÉAaZZbA^aAbáŽAŽZá' ááYbŽZAA & ^æŽÉa@ŽZáŽáB@YáYŽáA^a^báŽ@A \ á' | Ž@á'b [AY \ 'áZ' ááA' áA ~@^á'Y'bŽZÉ

Ł Y^Y^@Z' ááAb^AbáŽAŁ & Ž@ Y^YáAÓ \ ááAŁ áá^Y'Yb'^áDAŽ | Ž@ [A [ŽY@A' áAbáŽAUá'bŽZATbYbŽáA^ | Ž@A€ \ ÉDÉÉÉA ~Ž^~áZAZ' ŽAa@^ & Ab^Y^Y^Y^Y^ \ áZZAZ' áZ^YáZDA & Yæ' ááA'bAbáŽáŽY' ááAY^ \ áZá^a~@Ž | ŽáBAYáZAZZ^YbáÉA Ł á^báŽ@AGÉÉÉÉÉA~Ž^~áZAZ' ŽAa@^ & AŽ}~^á \ @ŽAb^AáŽY^áZáYáZá & ^æŽÉ

páŽAUá' | Ž@á'b [A' áAá' ááá [AY^& & 'bbŽZAb^Aá \ ~~@b' ááAYááAb \ ŽZáAbáA { á^A { 'áAb^AAb^~A \ á' áAb^Y^Y^Y^Y^A CE^@A' áa^@ & Yb'^áA^áA@Žá^ \ @YŽáAá^Ab^A [ább~IÉÉá'bŽáÉáY \ ÉZZ \ É { ŽááŽááAÉ](#)

ĀŠOÚŌTONĀŁ \ á \ ábAÉÉDÉDÉÉFB

8MJGAGR?RGML

T^à'ÿ'bYb'^âA'âAbâžA@Žã'ZZãÿŽâYââãA'ãA~@^â'ÿ'bžZAã^AYãAb^A~@^bžÿbA@Žã'ZZãbãAa@^&A\â { Žãÿ^&Žã | 'ã'bãA
YâZA~^ãã'ÿãŽAâY@Yãã&ŽãbÉARãâ[A@Žã'ZZãÿŽAâYââãA^@áYá']Yb'^ããA&Y[Aã^â'ÿ'bã'âAbâž'@A@Žã'ZZãÿŽAYâZA
bãŽãA^ãâ[A { 'bãAbãžAY~@^ | YãA^aAbãžãžYZA^aAâYããÉY@ŽYÿÿ^@Z'ãYb^@Éÿ^&&\â'b[Aÿ^@Z'ãYb^@É
T^à'ÿ'bYb'^âA^âAUâ']Ž@ã'b[A~@^~ž@b[A'ãAãb@'ÿbã[A~@^â'ÿ'bžZA { 'bã^bAbãžA~@'^@A~ž@&'ãã'^ãA^aAbãžAÑ'@Žÿb^@A
^aATb\ZZãbAk.Yb'|b'ŽãA^@AY~@^~@'YbžAYÿYZZ&'ÿAZžYãA^@AZž~Y@b&ŽãbããžYÉ