U{ mcdwu" Gpi kpggtkpi "Ngcf gtuj kr " GI U'825;

Ugevkqp'*Encuu'P q0+<"I GP 3'*4846; +
Encuu'Rgtkqf u+"O qpf c { u. "Rgtkqf u'5/6."; <57"6"33<52"c0 0
Nqecvkqp+"Y GTV"592

Ugevkqp'*Encun'Pq0+<1 GP 4'*48472+" Encun'Rgtkqf u<0 qpf c{u. 'Rgtkqf u'8/9. '34√2'6'4√67'r 0o 0' Nqecvkqp<'Y GTV'592

Cecf go ke"Vgto < Hcm'4247

30 Eq/Kpuvtwevqtu<

Dkm'O eGrtq{.'R0G0'Cuuqekcvg'Fktgevqt"cpf"I gpg'Htcugt"Vgcej kpi "Rtqhguuqt.'Gpi kpggtkpi "Ngcf gtuj kr "Kpuvkwvg."Wpkxgtukv{"qh'Hmqtkf c"*WH+"J gtdgtv"Y gtvj gko "Eqmgi g"qh" Gpi kpggtkpi "*J Y EQG+

'G/o ckricfftguuk'<u>o egrtav IB gpi OxhrOfw</u>

'Qhhleg'\gngr j qpg<626/; 37/25; 8'*egm+

"Qhhleg"mecvlqp<"qhh'eco r wu'hqt "Hcm'4247"ugo guvgt

"Qhhleg"j qwtu<\ qqo "r gtuqpcn'o ggvkpi "tqqo "j<u>wru<libhri) qqo 0xull 1833498: 857<"</u>; 22"vq"3222"c0b 0"Vwguf c{u0'Qyj gt"qpg/qp/qpg"\ qqo lr j qpg"eqpxgtucvkqpu"ctg" cxckredng"d{"cr r qkpvo gpv'*wug"go ckn'vq"ugv'wr +0

"Y gdukyg<"g/Ngctpkpi "B "WH

"VC"I tef gt <"Gxe"P cuvgxumc"**gpcuvgxumcB whrlof w"+_

"Eqwtug"eqo o wpkeckqpu<"Vj g"r tghgttgf 'hktuv'uvgr 'ku'\q"go cki'\j g"kpuvtwevqt."wukpi " yj g"Ecpxcu'eqwtug"o cpci go gpv'go ckii\qqn"hqt"i gpgtcn's wguvkqpu'cdqww'cur gewu' qh'\j g"eqwtug0

 $\label{thm:condition} \begin{tabular}{l} $\tt Igtgo { "Y ckuqo g." Rj (F 0" Vj qo cu' Q0 J wpvgt 'T kukpi "Uvct 'C uukuvcpv' Rt qhguuqt ." F gr ct vo gpv' qh' Gpi kpggt kpi 'Gf wecvkqp." Wpkxgtukv{ "qh' Hnqt kf c' *WH+" J gt dgt v' Y gt vj gko 'E qngi g' qh' Gpi kpggt kpi '* J Y E Q G+ \\ \end{tabular}$

'G/ockn'cfftguu≺<u>'lyckngogBgpi0whn0rfw</u>

'Qhheg'\gngr j qpg<574/4; 6/5859

"Qthleg"injecvkqp<Tqqo "424E."P wergct "Uekgpegu"Dwkrf kpi "*P q02856+

"Qhhleg"j qwtu

j wr uzlwhri) qqo ()xulo { llgtgo {y ckuqo g''qt''qhhkeg<3222''vq''3322''c()>0'Vwguf c{u0'' Qyi gt''qpg/qpg''o ggwpi u''qt''\ qqo lr j qpg''eqpxgtucwlqpu''ctg''cxckrcdrg''d{ '' crrqkpvo gpv'*wug''go ckn''q''ugv'wr+0

"Y gdukyg<<u>g/Ngctpkpi</u> "B "WH

"VC"I tef gt <"Gxe"P cuvgxume" *gpcuvoxumeB whrlof w"+

"Eqwtug"eqo o wpkeckqpu<'Vj g'r tghgttgf 'hktuv'uvgr 'ku'\q"go ckri'yj g'lpuvtwevqt.'wukpi "
yj g'Ecpxcu'eqwtug"o cpci go gpv'go ckri'qqn'hqt'i gpgtcri's wguvkqpu'cdqwv'cur gewi'
qh'yj g'eqwtug0

40' Eqwtug"F guetkr vkqp<"Gpi kpggtkpi "Ngcf gtuj kr "kpvtqf wegu"gpi kpggtkpi "uwf gpvu"vq" y g" eqpegr vu. "vj gqt { "cpf "r tcevkeg"qh"gpi kpggtkpi "ngcf gtuj kr = "ghhgevkxg" y tkwgp"cpf "qtcn" eqo o wpkecvkqpu"cpf "r tgugpvcvkqpu="gpi kpggtkpi "ngcf gtuj kr "ej ctcevgtkuvkeu."kpf kxkf wcn"

f khogtgpegu'cpf 'ugrh'cy ctgpguu='f gxgrqr kpi ''cpf ''dvkrf kpi ''vgco u='o cpci kpi ''ej cpi g.'' eqphrkevu.''cpf ''etkugu=''cpf ''wpf gtuvcpf kpi ''tgcn'y qtrf ''gyj keu''cpf ''eqtg''xcnwgu05''etgf kb'' j qwtu0

- 50' Etgf k/J qwtu<5
 I tcf wcyg'uwwf gpuu'y km'pqv'tgegkxg'i tcf wcyg'etgf k/hqt''vcmkpi ''yi g''wpf gti tcf wcyg''xgtukqp'' qh''yi g''ercuu0'Vj g{ "o c{ "gptqm'kp"yi g''wpf gti tcf wcyg''ugevkqp."dw''yi g''etgf kuu'y km'yi gp''pqv'' eqwpv''qy ctf ''yi g''f gi tgg0
- 60' Eqwtug'Rtg/Tgs wkukgulEq/Tgs wkukgu<'pqpg
- 70' Eqwtug"Qdlgevkxgu<"Vj g"o ckp"i qcnu"hqt"vj g"eqwtug"ctg"uwo o ctkl gf "dgmy 0'Uwxf gpvu" eqo r ngvkpi "vj g"eqwtug"y km'dg"cdng"vq<
 - "gpvgt"gpi kpggt/ngcf gt"tqngu'kp"vj gkt"rtqhguukqpcn'ectggtu."y j gvj gt'kp"vj g'rtkxcvg." cecf go ke."rwdnke."qt"pqp/rtqhkv'ugevqtu
 - 'kf gpvkh{.'kpvgtrtgv'cpf ''crrn{ ''y g'hqwpf cvkqpu'qh'ngcf gtuj kr ''vq''y gkt'kpf kxkf wcn' ngcf gtuj kr 'htco gy qtm''y kyj ''nkpnoci gu''vq''x kukqp.''j ki j ''gyj kecn'uvcpf ctf u''cpf '' r tqhguukqpcnkuo
 - "fgxgrqr" y gkt "ghhgevkxg" eqo o wplecvkqpu" cpf" rtgugpvcvkqp" umkmu
 - "crrn("eqpegruu"\q"dgwgt"o cpci g"eqmcdqtc\kxg"\gco "f {pco keu. "f tkxg"ej cpi g." cpf "o cpci g"eqphrkevu

Eqwtug"eqo r ngwlqp"ku"qpg"qh"yi g"r tgtgs wkukgu"vq"qdvckp"yi g"Gpi kpggtkpi "Ngcf gtuj kr "
Egtwhecvg"qhhgtgf "d{"yi g"J Y EQG"cpf "kuuwgf "d{"yi g"WH"i tcf wcvg"uej qqn0
i wruzly y y Qpi QwhQf whqcf gtuj kr lewttkewwo legtwhecvgul

- 80' O cygtken'epf "Uwrrn('Hggu<'pqpg
- 90' Rtqhguukqpcn'Eqo r qpgpv*CDGV+\'P qv'cr r nkecdrg''cu''eqwtug''ku''pqv'ur gekhke''vq''c''o clqt'' wpf gt 'CDGV'r wtxkgy 0
- : 0' Tgrcvkqp"\q'Rtqi tco "Qweqo gu"\CDGV+\Pqv'cr r rkecdrg"cu"eqwtug'ku"pqv'ur gekhle"\q"c" o clqt "wpf gt 'CDGV'r wtxkgy 0
- ; 0' Tgs wktgf "Vgzvdqqmu"cpf "Uqhwy ctg<"Rrgcug"pqvg"\j cv\'y ku"eqwtug"\ku"r ct\ke\kr cv\pi "\p"\'y g"

 WH'Cm'Ceeguu"r tqi tco 0!\\qi \kp"cv

 i_wr_uslv_y_y_0!\uf_0\wr\pf_w\ll_3EO_I\Rc{3hluvetx0\text{vour}_z_AVCUM? RP_ENWF_GF_"cpf "\Qr v\\pf_\"vq"i c\\pp"

 ceeguu'\q"\{qwt"tgs wktgf "eqwtug"o cvgt\kcm\0\WH'Cm'Ceeguu'y km'r tqx\kf g"\{qw'y kyj "\{qwt" tgs wktgf "o cvgt\kcm\0'\WH'cmf keeguu'y km'r tqx\kf g"\{qw'y kyj "\{qwt" tgs wktgf "o cvgt\kcm\f" ki kcm\f" cv\c"tgf wegf "r t\keg"cpf "\yj g"ej cti gu'y km'r quv\f ktgev\f" \qm\f" qwt" uwwf gpv\ceeqwpv."cmqy kpi "cp\f" cxc\krcdrg"H\pcpe\kcm\C\kf "hwpf u"\q"eqxgt"\yj g"equv\qh"\{qwt" o cvgt\kcm\0'\Vj ku"qr \kqp"y km'dg"cxc\krcdrg"uvct\kpi "3"y ggm\r t\kqt"\q"\yj g"h\tuv\f c\f" \qh\"encuu\0"\text{VHCNNCEEGUU}

 cpf "gpf \kpi "5"\y ggm\chgt"\yj g"h\tuv\f c\f" \qh\"encuu\0"\H\text{VDP <"WHCNNCEEGUU}

Cngtpc\kxgn[."\j g"\gzv\ecp"\dg"\qdv\k\gf"\j tqwi j "\j wru\fly y \Q \k\gf\rangle \frac{1}{2} \left{\rangle \text{frao lgp/"}}...

wu\Ngctp\k\pi - \Ngcf gtuj \kr' \ 5C- \Vj g- \Hx\g- \Hx\pf co gp\cn- q\h- \Dgeqo \kpi - cp- \Gz\go r rct \{-\frac{\pi}{2}\}

Ngcf gt- \rangle \frac{\pi}{2}: 333: 3664: 3<

"Vkurg<'Ngctpkpi 'Ngcf gtuj kr
"Cwj qtu<'LOO 0'Mqw| gu"cpf 'DO\ 0'Rqupgt
"Rwdrkecvkqp'F cvg"cpf 'Gf kkqp<'4238
"KDP 'pwo dgtu<
; 9: /3/33; /3664: /3'\% ctf eqxgt+
; 9: /3/33; /3664; /: "\%gRF H+

; 9: /3/33; /36652/6'*gRwd+

Ötef wew 'uwf gpw'y kni'dg'tgs wktgf '\q'r wtej cug''c 'ecug''uwf { "qprkpg'uko wrekqp''r cenci g" Ej cpi g'O cpci go gpv'Uko wrekqp<'Rqy gt "cpf "Kohrwgpeg''X5."d { 'Lwf i g''cpf "J kni'*94713: +" cxckredrg''y tqwi j 'J ctxctf 'Dwukpgwu''Uej qqri'Rwdrkuj kpi 0'Vj g''equw''y kni'dg''qp''y g''qtf gt''qh'' &38047''r gt 'uwf gpw'Vj g''kpurtwerqt 'y kni'r tqxkf g''o qtg''kplqto crkqp''cdqw''qdvckpkpi ''y g'' r cenci g''cv''cp''cr r tqr tkcrg''ko g''f wkpi ''y g''ugo gurgt0'Vj kni'hqto ''y g''dcuku''qh''c 'ur gekcni' i tcf werg''uwf gpv'cuuki po gpv'hqt''y g''eqwtug''qy ctf u''y g''rewgt''r ctv'qh''y g''ugo gurgt0

Kp"cf f kkqp." 'y gtg" y km"dg"cf f kkqpcn"cuuki pgf "tgcf kpi u"cpf "kphqto cvkqp" tgrcvgf "vq"gcej " o qf wrg0Tgcf kpi "o cvgtkcni"ctg"ct kergu" y cv"ctg"gkj gt "cxckrcdrg" hqt "httgg" 'vq" WH" uwf gpwi" grgevtqpkecm ("vj tqwi j "vj g" Wpkxgtukx ("g/rkdtct { "u{ uvgo ."qt"r quvkpi u"qp" y g'Ecpxcu" eqwtug" y gdukxg0" Vj g" kpuxtwevqt" y kri'qwxkpg" y g'cf f kkqpcn" cuuki pgf "o cvgtkcni" f wtkpi "vj g" httuv" encuu" uguukqp0

- 320' Tgeqo o gpf gf "O cvgtkcni</br>
 "Kpf kxkf wcn'o qf wrgu"y km'cniq"j cxg"cf f kkqpcn'tgeqo o gpf gf "tgef kpi "cuuki po gpvu"cpf "o cvgtkcni0"Vj gug"y km'cniq"gkij gt "dg"htgg"ct vkergu "cxckredrg" grgevtqpkecm("vj tqwi j "vj g"Wpkxgtukx{"g/rkdtct{"u{uvgo ."qt"r quvkpi u"qp"vj g"Ecpxcu"eqwtug" y gdukxg0"Vj g"kpuvt wevqt "y km'qwrkpg"vj g"cf f kkqpcn'o cvgtkcni"f wtkpi "vj g"hktuv'ercuu" uguukqp0
- 330' Eqwtug"Uej gf wrg<"Vj g"5"etgf kvj qwt"eqwtug"y kni'dg"f grkxgtgf "kp"c"j {dtkf "hqto cv'y kj" u{pej tqpqwu"4/j qwt"r gtkqf u"j grf "gcej "y ggmigksj gt"qp"O qpf c{"o qtpkpi u"qt"O qpf c{" chgtpqqpu"*f gr gpf kpi "qp"vj g"ercuu"ugevkqp+0"Vj g"hqto cv'qh'vj g"ercuu"uguukqpu"y kni'eqpukuv" qhi'rgewtg"qxgtxkgy u"d{"vj g"kpuvtwevqt."f kuewuukqpu"qt"y qtmuj qr u"hcekrkxcvgf "d{"vj g" kpuvtwevqt"cpf "uwr r qtvgf "d{"i wguv'r tgugpvgtu."r nwu"qvj gt"ercuu"cevkxkkgu0"Uwf gpwu'y kni' cnuq"y qtmicu{pej tqpqwun{"vq"eqo r rgvg"ur gekhke"y ggmn{"cevkqpu"vq"o ggv'eqwtug"eqpvgpv' tgs wktgo gpwu"vj tqwi j "kpuvtwevkqpu"r tqxkf gf "kp"vj g"Ecpxcu"eqwtug"o cpci go gpv'u{urgo 0

Rgt"WH'i whf grhpgu. "vj g"eqwtug"gs wcvgu"vq"407"j qwtu"qhl'gs whxcrgpv'y ggmn("öeqpvcev" r gthqf uö"*72"o hpwgu"r gt"r gthqf +0'Vj g"WH'f ghhpkhqp"cuuwo gu"vj cv'uwwf gpvu"o c{ "ur gpf "c" o hpho wo "qhl'8"cf f khqpcnij qwtu"*4"j qwtu"r gt "etgf kv'j qwt+"qwuhf g"qh'vj g"y ggmn(" gs whxcrgpv'eqpvcev'vho g"hp"eqo r ngwhpi "vj g"eqwtug"tgs wht go gpvu0

Vj g'qwwkpg'qh'o ckp''\qr keu'gzr gevgf '\q'dg''eqxgtgf 'kp''gcej ''o qf wrg.''uwf gpv'rgctpkpi '' qdlgevkxgu'hqt''gcej ''o qf wrg.''cpf ''ng{ ''cevkxkkgu''eqttgur qpf kpi ''\q''gcej ''o qf wrg''ctg'' uwo o ctk| gf ''dgmy 0'Vj g''cewcn'cxckrcdkrkv{ ''cpf ''f wg''f cyu'hqt''cuuki po gpvu.''cevkxkkgu.''cpf '' s wk| | gu''ctg''ugv'kp''yj g'Ecpxcu''eqwtug''o cpci go gpv'u{ uvgo ''s'ugg''U{ mcdwu'r ci g''qh'Ecpxcu'' eqwtug''ukyg+0'Vj g'y ggmn{ ''kput we kqpu''kp''yj g'Ecpxcu''eqwtug''y gdukyg''tcem'yj g'uwo o ct { '' vcdrg''cpf ''r tqxkf g''cf f kkqpcn'f gvckn<

Wpku	Y ggmu" *O qp/Uvp+" Ugg"encuu" uej gf wrg"hqt" f cvgu	Gzr gevgf" Eqxgtci g"cpf" F kæwnklqp" Vqr keu" *O qf wg+	Uwf gpv'Ngctpkpi " Qdlgevkxgu" hqt"Wpkv	^{Pæ}] Cevkxkvkgu' [®]
	3" Vj wtu."Cwi " 43uv'ku'hktuv' fc{"qh" ugo guvgt	eqwtug"qxgtxkgy" cpf "kpkkcn" ngcf gtuj kr" eqpegr vu" *3+	"Øäæ^\⇔à]Áá^äÁäæb´ã↔âæÁ\	Tgxkgy "u{mcdwu"cpf "eqo r mgvg" u{mcdwu"s wk
Hqwpf cwlqpu" qhiNgcf gtuj kr" *O qf wrgu"3/6+	4" Oqpfc{.'Cwi'' 47 ³ 'ku'hktuv' encuu'uguukqpu	eqwtug"qxgtxkgy " cpf "kpkkcni' ngcf gtuj kr " eqpegr vu" *3+	"Øäæ^\↔à]Áá^äÁäæb´ã↔âæÁ\ ´~ ãbæÁ´~\æ^\Áá^äÁ ~â↓æ´\↔{æb "Œæb´ã↔âæÁá^äÁá**ãá↔bæÁ\ ´~↑*~^æ^\bÁ~àÁ æ^&↔^ææã↔^&Á→æáäæãbå↔* "Ø^\æã*ãæ\Áá^äÁ´~↑*áãæÁ ←æ]Á´~↑↑~^Áæ→æ†æ^\bÁ~ài æààæ´\↔{æÁ→æáäæãbå↔*	Cwgpf 'y ggmn("ercuu'uguukqp Tgxkgy 'u(mcdwu'cpf "eqo r mgg"
	5" pq"encuu" uguukqpu"vj ku" y ggmiö" O qpf c{"ku"c" j qnkf c{	vtww." hqmqy gtuj kr :" ngcf gtuj kr " hwpf co gpvcni" cpf "htco gy qtmu:" ngcf gtuj kr " eqo r gvgpekgu:" ewtkqukv{" *4+	~^*~^æ^\bá~àáâ ↔-ä↔^&; \ã b\áá^äÁà~→~}æãbå↔* \N**ãá↔bæáá^äá´ã↔\⊕@ æÁ ~↑↑~^Á→æáæãbå↔*Á à ^äá↑æ^\á→bÁ àãá↑æ}~ã←b£Áá^äÁ ~↑*æ\æ^´↔æb \@æb´ã↔âæáá~äÁá**ãá↔bæÁ b↔&^⇔à↔´á^´æÁ~àÁ´ ã↔-b↔	/" y ggmn('C3'tgcf kpi 'kpuki j vu /" RX3 Eqo r ngvg'y ggmn("encuu'r qkpvu" cevkxkv(
	6	rgcf gtuj kr " yj gqtkgu" *5+	'Øäæ^\⇔à]Áá^äÁ´~↑*áãæÁ ´~↑↑~^Á→æáäæãbå↔*Á \åæ~ã↔æbÁ\åá\Áåá{æÁ æ{~→{æäÁ~{æãÁ\↔↑æ	Uwdo kwcnu" *wreqo kpi "Uwpfc{" ro +< /" y ggmn{ 'C3'tgcf kpi 'kpuki j vu /" Kpkkcn'KNF R Y ggmn{ 'encuu'r qkpvu'cevkxkv{

Wpku	Y ggmı" *O qp/Uwp+" Ugg'encun" uej gf wg'hqt" f cygu	Gzr gevgf" Eqxgtci g'cpf" F kæwukqp" Vqr keu" *O qf wg+	Uwf gpv'Ngctpkpi " Qdlgevkxgu" hqt"Wpkv	^{Pæ}] Cevkxkvkgu' ⁹
			"O~↑*áãæÁá^äÁábbæbbÁ ´~↑↑~^Á→æáäæãbå↔*Á \åæ~ã]Áá**→↔´á\↔~^b	Eqorngvg'qvjgt''cuukipgf'' ocvgtkcni'*iugg''kpuvtwevkqpu+ Rtgrctg''hqt''cpf''eqorngvg Swkj''3'**cxckrcdng''wreqokpi'' Uwp/Oqp+ Qvjgt< /'' kpkkcvg''C4'**kpfkxkfwcn+ /'' kpkkcvg''yqtm'qp''KNFR'' gzrgtkgpeg
Hqwpf cvkqpu" qh"Ngcf gtuj kr" *O qf wgu"3/6+	7	o qtg"rgc"f "gtuj kr " eqpegr vu" *6+	á^āÁ*~}æã 'Œæà↔^æÁá^äÁæ{á→ á\æÁ ´~↑↑~^Ááb*æ´\bÁ~àÁ æ\å↔´á→Á~æâäæãbå↔*Áá^ä; æ\å↔´á→Á~ã&á^~čá\↔~^á→; ´ →\ ãæb 'Œæà↔^æÁá^äÁábbæbbÁ\åæÁá	ro +< /"y ggmn{ 'C3'tgcf kpi 'kpuki j vu /"RX4 /"C4 **Eqo r rgvg'S wk "3'**emqugu'O qp" ro + Y ggmn{ 'encuu'r qkpuu'cevkxkv{ Eqo r rgvg'C4"cpf 'RX4" cuuki po gpvu
4" Ypf kxlf wen' Ngef gtuj kr" F gxgrqr o gpy' *O qf wrgu'7/: +	8	r gtuwcukqp"cpf " kphrwgpeg" *7+	"O~↑*áãæÁá^äÁábbæbbÁ\åæi ã~→æbÁ~àÁá^äÁ←æ]Å ä⇔ààæãæ^´æbÁâæ\}ææ^Á *æãb áb⇔~^Áá^äÁ⇔^à→ æ^ ⇔^Á→æáäæãbå⇔* "Ö{á→ á\æÁá^äÁ´~↑*áãæÁ\á ←æ]Á*ã↔^´↔*→æbÁ~àÁ *æãb áb↔~^	Uwdokwcnu'*wreqokpi "Uwpfc{" ro+ /" y ggmm("C3"tgcfkpi "kpukij vu æ\u00e4 Y ggmm("encuu'rqkpvu'cevkxkv(k\u00e4\u00e4 Eqorngvg"qvjgt"cuukipgf" ocvgtkcnu'*tugg"kpuvtwevkqpu+ Qvjgt /" kpkkkcvg"C5"*vgco+ /" eqpvkpvvg"yqtm'qp"KNFR" gzrgtkgpeg
	9	r gt 'u''w'c'u'lksg" eqo o wplecvkqpu" *8+	"Û^äæãb\á^äÁá^äÁá^á→]`æi ´~^´æ*\bÁá^äÁ*ã↔^´↔*→æi bæäÁ\~Áäæ{æ→~*Á *æāb áb↔{æÁ}ã↔\æ^Á ä~´ ↑æ^\bÁá^äÁ *ãæbæ^\á\↔~^b	Uwdokwcnu'*wreqokpi"Uwpfc{" péro+< /"yggmm('C3'tgcfkpi'kpukijwu /"C5 Yggmm('encuu'rqkpwu'cevkxkw{ Eqorngwg'C5'cuukipogpv

Wpku	Y ggmı" *O qp/Uwp+" Ugg"ercuu" uej gf wrg'hqt" f cvgu	Gzr gevgf" Eqxgtci g"cpf" F knewnikqp" Vqr keu" *O qf wrg+	Uwf gpv'Ngctplpi " Qdlge\kxgu" hqt"Wplv	Pæ] Cevkxkkgu' ⁹
			"N**→]Áá^ãá^ãá\æÁ *æãb áb⇔{æÁ}ã↔\æ^Á ä~′ ↑æ^\bÁá^äÁ *ãæbæ^\á\↔~^b	Eqorngvg"qvjgt"cuukipgf" ocvgtkcnu™ugg"kpuvtwevkqpu+ Rtgrctg"hqt"cpf"eqorngvg Swkt"4™cxckncdng"wreqokpi" Uwp/Oqp+ Qvjgt /"eqpvkpwg"yqtm"qp"KNFR" gzrgtkgpeg
4" Kpf kxkf wcn' Ngcf gtuj kr" F gxgnqr o gpv' *O qf wrgu'7/: +	÷	eqphilev' tguqnwlqp=" f khilewn" eqpxgtucvlqpu" *9+	"Ü^äæāb\á^äÁá^äÁ↔\æā*ā:	/" y ggmm("C3"tgcfkpi "kpukij vu /" RX5 ^{(A} Eqormgvg"Swk("4"∜enqugu"Oqp"
	ţ	go q'Vk'q'p'cn' kpvgnki gpeg." r gtuqpcnk{."cpf" eqo o wpkecvkqpu" *: +	\åæÁ´~^´æ*\Áá^äÁã~→æÁ~a	Y ggmn("C3"tgcf kpi "kpuki j vu Y ggmn("encuu"r qkpvu"cevkxkv(æ]Á Eqorngvg"qvj gt"cuuki pgf" o cvgtkcmi"sugg"kpuvtwevkqpu+ Qvj gt< //" kpkkkcvg"C6"stgco+ /" eqpvkpwg"y qtm"qp"KNFR" gzrgtkgpeg
	32	o qvxcvkq"pcn" yj gqtkgu"cpf " crrnkecvkqpu" *; +	"b~↑*áãæÁá^äÁábbæbbÁ\åæi à ^äá↑æ^\á→Ááb*æ´\bÁ~à. ←æ]Á↑~\↔{á\↔~^á→Á ´~^´æ*\bÁá^äÁ\åæ~ã↔æb	Uwdokwcni*wreqokpi"Uwpfc{" ^ro+< /"yggmn{"C3"tgcfkpi"kpukijuu /"C6 Yggmn{"encuu"rqkpvu"ce√kxkv{

Wpku	Y ggmı" *O qp/Uwp+" Ugg"ercuu" uej gf wrg'hqt" f cvgu	Gzr gevgf" Eqxgtei g"cpf" F kuewukqp" Vqr keu" *O qf wg+	Uwf gpv'Ngctpkpi " Qdlgevkxgu" hqt'Wpkv	Pæ] Cevkxkkgu' ^g
5" Ngcf gtuj kr " cpf "43w" Egpwt {" Qti cpk cvkqpu" *O qf wgu" ;/37+	33	vgco u.'V'g'co " f {pco keu'cpf" vgco " f gxgrqr o gpv' *32+	"O~1*áãæÁá^äÁäæb´ã⇔âæÁ \åæÁ\æã↑bÁ´~1↑↔\ræ^\Á á^äÁæ^&á&æ†æ^\ÊÁá^äÁ ábbæbbÁàá´\~ãbÁ\åá\Á↔↑\忆Á~ãÁ ~ã&á^⇔´á\⇔~b "Öäæ^\⇔à]Á~&ãášá*á*à àā`(~ãbÁ↔†á´Aá äæ{æ→*†æ^\Áá*áá æàæ´*(→{æ*abb} "Œb´ã⇔âæÁá*äÁ⇔^\æā*āæ\¼\åæÁ`~āfòæbbÁ÷æ]Á àá´\~ābÁ÷ÂäA æàæ´*†~^Áä]^á†↔'bÁ↔`\ åæÁ*a*†òÁá*äábæbbÁ÷æ]Á àá´\~ãbÁ÷Âäæá*ā*á*àA*aå\æá†b "O~1*áãæÁá*äÁä*àÄ*àA`áA`áA`áA` ⇔ààæãæ*´æbÁ\åá\Á´á^Á ⇔†á´\Á\æá†Aä]^á†↔'bÉÁ á*áå*äá`†⇔£Áä}ā†á†⇔`bÉÁ á*áå*äá`†⇔£Áå]^á†⇔`bÉÁ á*áå*äá`†⇔£Áå]^á†⇔`bÉÁ á*áå*äá`†⇔£Áå]^á†⇔`bÉÁ á*áå*äá`†⇔£Áå]^á†⇔`bÉÁ á*áå*äá`†⇔£Áå]Aå†⇔`bÉÁ á*áå*äá`†⇔£Áå]Aå†òåå á*a´æ "Ö{á→ á\æáååæåå*àååååååååååååååååååååååååååååååå	Y ggmm ("encuu"r qkpvu"cevkxkv{ Eqorngvg"RX6 Êqorngvg"qvj gt"cuuki pgf" ocvgtkcnu*iugg"kpuvtwevkqpu+ Qvj gt< /" eqpvkpwg"y qtm"qp"KNFR" eA gzrgtkgpeg
	34	ngef k'p'i "cpf " o cpci kpi " ej cpi g" *33+	"Ö{á→ á\æÁá^äÁá**→]Áâæb' *ãá´\↔´æbÁ}⇔\åÁãæb*æ´\¿ →æáä⇔^&Áá^äÁ†á^á&↔^&Á ´åá^&æÁ÷^Á*ã~↓æ´\bÁá^ä; ~ã&á^&ĕÁ↔^b "O~†*áãæÁá^äÁá**→]Áâæb\; *ãá´\↔´æbÁ↔^Á→æáã^↔^&Á áb←Á&~~äÁ@ æb\↔~^b	/" y ggmn{"C3"tgcfkpi "kpukij vu Y ggmn{"encuu"r qkpvu"cevkxkv{
	35	eqt"r "q"t"cvg" ewnwtg≐uqo g" ngcf gtuj kr	"Øäæ^\+à]Áá^äÁábbæbbÁ←æ æ→æ↑æ^\bÁá^äÁàá´\~ãbÁ\; à~ã↑Áb\ã~^&Á´ →\ ãæbÁ+	áUvdok vcnu'∜vreqokpi "Uvvpfc{" tá∖né+< /'yggmn{'Ľ3'tgcfkpi'kpukijvu

Wpku	Y ggmu" *O qp/Uvp+" Ugg"ercuu" uej gf wrg'hqt" f cvgu	Gzr gevgf" Eqxgtci g"cpf" F knewndqp" Vqr keu" *O qf wrg+	Uwf gpv'Ngctplpi " Qdlgevkxgu" hqt"Wpkv	Pæ] Cevkxkskgu' ^s
		tgenkkgu"kp" o qf gtp"f c{" qti cpk cvkqpu" *34+	*ãá´\⇔´æh∆!åæ^∆→æáä⇔^&;	/" C7 AY ggmm("encun'r qlopus'cevloolof Eqorrgog"qvj gt"cunki pgf" o cogtlom "ugg"lopustwevlqpu+ Rtgrctg"hqt"cpf"eqorngog"Swl;" 6"%cockrodng"wreqolopi"Uwp/" Oqp+ Qvj gt< /" eqpylopwg"y qtm'qp"KNFR" gzrgtkgpeg
5" Ngcf gtuj kr " cpf "43uv" Egpwt {" Qti cpk cvkqpu" *O qf wrgu" ;/37+	36	rgcf gt "u"j "kr "cpf" et gc \kxk\{ =" f kxgt ulx\{ "cpf" kpenwikqp" *35+	æ→æ↑æ^\bÁá^äÁàá´\~ãbÁ\à ↔↑*ã~{æÁ´ãæá\↔{æÁ →æáäæãbå↔*Áá^äÁæ\å↔´á→i ↔^^~{á\↔~^b "Ó{á→ á\æÁá^äÁá**→]Áâæb\ *ãá´\↔´æbÁ}↔ÅåÃæb*æ´\i ä↔{æãb↔}\	Eqorngvg'S wk "6"*enqugu √O_Anpfc{"rob 0+
5"	37" pq"encuu" uguukqpu'\(\frac{1}{2}\) ku" y ggm\(\frac{1}{2}\) cpmui kxkpi " Y ggm	uchgv("kp" gpi kpggtkpi =" uwuvckpcdkrkv("kp" gpi kpggtkpi " *36+	^↔^äbæ\Á↔^{~→{æäÁ}↔\åÁ	Uwdo kwcni*wr eqo kpi "Uwpf c{" ro 'wpnguu'qyi gty kug''uvcygf +/' /'y ggmn{'C3'tgcf kpi 'kpuki j vu'' /'C8 /'' C9 /'' Hkpcn'KNF R'*f wg''Y gf 0" 33 148+ Y ggmn{'encuu'r qkpvu'cevkxkv{'*kh'' cxckrcdng+ Eqo r ngwg'qyi gt''cuuki pgf'' o cvgtkcni**ugg''kpuvtwevkqpu+ Eqo r ngwg''eqwtug''gxcnwcvkqpu Rtgr ctg''hqt''cpf ''eqo r ngwg''S wki'' 7'**ugg''encuu'uej gf wng''hqt''f cvgu+
Ngcf gtuj kr " cpf "43uv	38	r tqhguukqpcn' etgf kdkrk√{.	"Øäæ^\↔à]Áá^äÁábbæbbÁ\åa ´~^´æ*\Á~āÁ´ãæä↔â↔↔\]]	áUwdokwcnu"∜wreqokpi"Uwpfc{" fárörk

Wpku	Y ggmı" *O qp/Uvp+" Ugg"encuu" uej gf wrg'hqt" f cvgu	Czr gevgf" Eqxgtci g"cpf" F kæwudqp" Vqr keu" *O qf wg+	Uwf gpv'Ngctplpi " Qdlge\xgu" hqt'Wplw	^{Pæ}] Cevkxkvkgu' ⁸
Egpwt {" Qti cpk cvkqpu" *O qf wgu" ;/37+	*icuv'ercuu" uguukqpu+	r tql guul qpcr l uo ." cpf "encuu"enqug/ qwv" *37+	↔ãæ^\⊹à]Á↔\bÁà~ ^äá\↔~ ↔^´→ ä↔^&Á→æáäæã ´åáãá´\æã "Œæà↔^æÁá^äÁábbæbbÁ\åæÁ ´~↑*~^æ^\bÁ~àÁ *ã~àæbb↔~á→↔b↑	Pottope Y ggmn("ercuu"r qkpvu"cevkxk√ Eqorngvg"qvj gt"cuuki pgf" ocvgtkcmu"*ugg"kpuvtwevkqpu+ Eqorngvg"eqwtug"gxcnvcvkqpu Rtgrctg"hqt"cpf"eqorngvg"Swkj" 7"*ugg"ercuu"uej gfwrg"hqt"fcvgu+

PQVGU<

340' Rqrkekgu'cpf 'Ercuu'Gzr gevcvkqpu<

I gpgtcn

"Vj g"rgctpkpi "gpxktqpo gpv'hqt"Gpi kpggtkpi "Ngcf gtuj kr "ku'kpvgpf gf "vq"dg" r tqhguukqpcn"eqwtvgqwu'cpf "tgur gevhwt)Vj g"eqwtug"ku'f guki pgf "ctqwpf "y j cv'ctg"dgrkgxgf "vq"dg"ewttgpv'cpf "tgrgxcpv'vqr keu"cpf "dguv'r tcevkegu'vq"j grr "etgcvg"cpf kqt"f gxgrqr "I cvqt" Gpi kpggtu'y j q"ctg'r tgr ctgf "vq"ceegr v'tqrgu."cpf kqt"cf xcpeg."cu'cp"gpi kpggt/rgcf gt "kp" y gkt "ectggt0

Vj g'kpuntwevqtu''ctg'hwm('kpxguvgf 'kp''y ku''eqwtug''kpuntwevkqpcn'ghhqtv0'Vj g{ ''ctg''o qtg''y cp'' y kmkpi ''vq''r tqxkf g''uwxf gpvu''y kyj ''yj g''eqttgur qpf kpi ''uwdlgev'o cwgt''gzr gtvkug.'' r tqhguukqpcn'gzr gtkgpeg. ''cpf ''lwf i o gpv''vq''ceeqo r nkuj ''eqwtug''qdlgevkxgu''cpf ''o czko kţ g'' uwxf gpv''ngctpkpi ''qweqo gu0'Vj g{ ''ctg''cnuq''qr gp''vq''uwi i guvkqpu''cpf ''eqpuntwevkxg'' etkkekuo u''vq''eqpvkpwcm('ko r tqxg''yj g''qpnkpg''eqwtug0

Vq"r tqo qvg"c"o qtg"eqo r ngvg"vpf gtuvcpf kpi "cpr "cr r nkecvkqp"qh'vj ku"eqwtug"eqpvgpv."
uwf gpwi'y kni'dg"tgs wktgf "vq"eqo r ngvg"cp"Kpf kxkf wcni'Ngcf gtuj kr "F gxgnqr o gpv'Rncp"
*KNF R+0Vj g"KNF R'ku"kpvgpf gf "vq"cuukuv'uwf gpwi'kp"wpf gtuvcpf kpi "cpf "cr r n{ kpi "ng{ "eqo r gvgpekgu"vj cv'ctg"tgncvgf "vq'vj g"eqwtug"eqpvgpv'cpf "dcugf "qp"vj gkt "kpf kxkf wcn"
uvtgpi vj u. "cpf "pggf gf "hqt"ghhgevkxgpguu"kp"vj gkt "ectggtu"cu"gpi kpggtkpi "ngcf gtu0Vj g"KNF R"
ku"c"tgs wktgo gpv'cpf "c"ng{ "f gnkxgtcdng"hqt"eqo r ngvkqp"qh'vj g"eqwtug0O qtg"cdqw'vj g"
KNF R"ecp"dg"hqwpf "kp"vj g"KNF R"Htco gy qtmif qewo gpv'cxckncdng"qp"vj g"Ecpxcu"eqwtug"
y gduky0

Uwf gpui'y kni'gctp'r qkpwi'cv'gcej ''encuu'uguukqp."cu'r ctv'qh'y g'r ctvkekr cvkqp'ueqtg'' eqo r qpgpv'hqt'y g''eqwtug0C''u{ mcdwu''s wkļ ''y kni'dg'r ctv'qh'y g''r tgr ctcvkqp''cpf '' r ctvkekr cvkqp''r qkpwi'hqt'y g''hktuv'y ggmi'qh'encuu0'Uwf gpwi'ctg''gzr gevgf ''vq''eqo g''vq''encuu'' uguukqpu''r tgr ctgf ''vq''cevkxgn{ ''r ctvkekr cvg''kp''encuu''f kuewuukqpu''cpf ''cevkxkkgu0'Uwf gpwi'' uj qwrf ''gzr gev'vq''dg''cdng''vq''cpuy gt''i gpgtcn's wguvkqpu''cdqww'yi g''cuuki pgf ''o cvgtkcnu''cu'' r ctv'qh''gcej ''y ggmn{ ''encuu''uguukqp''y j kej ''o c{ ''kpenwf g''wug''qh'yi g''kEnkengt''u{ uvgo 0'Hqt'' y ggmu'y j gp''encuugu''ecppqv'dg''j gnf .''r ctvkekr cvkqp''r qkpwu'y kni'dg''qdvckpgf ''d{ ''eqo r ngvkpi '' ur gelkhe''cuuki po gpwi'tgi ctf kpi ''yi g''eqpvgpv'hqt''yi cv'y ggm0

³'Ur gekhle'Ecpxcu'cuuki po gpvu'y km'dg'o cf g'\j cv'y km'i qxgtp'cewcn'f cvgu''qh'cxckrcdkrk√ ''cpf ''uwdo kwcnı0Qvj gt''ercuu'' cevkxkkgu''o c{ ''dg''kpxqnxgf ≓tghgt ''vq''hqmqy 'Ecpxcu''eqwtug''uksg0

Vj g'Gpi kpggtkpi "Ngcf gtuj kr "Kpurkwwg" "GNK4"qhlgtu "grgevkxg" eqwtugu "cpf "etgf gpvkcru" y cv" j grr "gpi kpggtkpi "uwwf gpwu"dwkrf "xcnwcdrg" r tqhguukqpcn"unkmu "qhxgp" o kuukpi "htqo " vtcf kkqpcn"gpi kpggtkpi "r tqi tco u0"Y g"y greqo g"uwwf gpwu"y j q"vcng"qy pgtuj kr "qh" y gkt" rgctpkpi "cpf "ctg" eqo o kwgf "vq"hwn ("gpi ci kpi "y kyj "yj g"eqwtug" eqpvgpv"cpf "kwu"tgcn'y qtrf " crrrkecvkqpu0"Uq" yi cv"gxgt { qpg"ku"qp" yi g"uco g"r ci g. "y gøxg" r quvgf "eqwtug" gzr gevcvkqpu" hqt" uwwf gpwu"qp" qwt" y gdukyg0"Vj g"kpuntwevqtu"y knitgxkgy "cpf" f kuewuu" y go "kp"ercuu"cv" y g"uctv"qh" y g"ugo guvgt0

Tgs włtgo gpwi'nqt "encuu'cwgpf cpeg. "gzewugf "cdugpegu."o cng/wr "gzco u. "cuuki po gpwu."cpf "qyi gt "y qtmlkp" yi ku "eqwtug "ctg "eqpukugpv" y kyi "wpkxgtukx{"r qnkekgu0Enkent'j gtg "vq" tgcf "yi g"wpkxgtukx{"cwgpf cpeg "r qnkekgu

Vwtpkpi 'kp'kphqto cvkqp''yi cv'o c{"dg'tgs wguvgf 'd{"yi g'kpuvtwevqt."uki pkpi 'cp''cwgpf cpeg'' uj ggv."qt''qyi gty kug''cuukuvkpi 'c''pqp/cwgpf kpi ''uwvf gpv'kp''qdvckpkpi ''y ggmn(''ercuu''r qkpvu'' o c{"dg''eqpukf gtgf 'hqt''j qpqt''eqf g''xkqrcvkqp0

Vj g'kpuntweytu'j cxg'pq'cdkkk{ "vq'cfftguu'qt'tguqrxg''yej pqqqi { "kuuwgu'tgrcvgf "vq'y g" Ecpxcu'eqwtug'o cpci go gpv'u{ uvgo 0'Ki'c'uwf gpv'dgrkgxgu''y cv'cp'kuuwg''qh'y ku'pcwtg'y cu'' tgur qpukdrg'hqt''cp''gxgpv.''uwej "cu'c'rcvg'kpfkxkf wcn'qt''ygco "uwdo kwcn'qt''uqo g" o crhwpevkqp'f wtkpi "c''s wkt.''y gp'kk'ku''y cv'uwf gpvxu'tgur qpukdktk{ "vq'fkuewu''y g''kuuwg'' y ky "'y g'WH'J GNR'F gum*574/5; 4/6579+"qdvckp'f qewo gpvcvkqp'htqo "'y go "cdqw''y g" kuuwg."cpf 'hqmqy /wr 'y ky "'y g'kpuntwevqt''wr qp''y g''uwr r qtvgf 'eqpenwukqp''y cv'c'Ecpxcu'' kuuwg''y cu'kp'hcev'kpxqrxgf 'y ky "'y g'gxgpv\0'Vj g'kpuntwevqt''y kni'o cng''ko g''gzvgpukqpu'hqt'' uwf gpvu'j cxkpi ''y gug'qt''qy gt''ngi kxko cvg'tgcuqpu*1qt"gzco r rg."c'f qewo gpvgf 'j gcny "kuuwg+'hqt''c''rcvg'uwdo kwcn''s wkt "ceeguukdkrk\{ 'kuuwgu.''gve0

Qyj gt "Ur gekhke 'Rqnkekgu'cpf 'Gzr gevckqpu<

 $\label{thm:constraint} Wug''qh'CK'[qw'ctg''c'uwf gpv'cv'y ku'kpurkwkqp''dgecwug''{qw'hxg'kp''c'htgg''uqekgv{''y cv' xcnvgu'kpvgngewcn'htggf qo ''cpf ''y g''qr gp''gzej cpi g''qh'kf gcu0[qw'ctg''j gtg''vq''getp.''i tqy .'' cpf 'f gxgnqr ''{qwt''qy p''etkkecn'xqkeg''ô pqv'vq''eqr {''qt''uwdurkwwg''qyj gtu)'y qtm'hqt''{qwt'' qy p''wpf gtuvcpf kpi 0}$

Uwf gpwl'o c{ "wug'i gpgtcvkxg'CK\qqnı" \tivej "cu'Ej cvl RV. 'Encwf g. "gw0+"\q"gpj cpeg"\j gkt" ngctplpi "cpf" y tkkpi 'r tqeguu. "dw'o wuv'f q'uq"\tcpur ctgpvn{. "gyj kecm{. "cpf" tgur qpukdn{0CK\uj qwrf 'ugtxg'cu'c 'eqmcdqtcvkxg'\qqn\\q"uwr r qtv'dtckpuvqto kpi . "kf gc" i gpgtcvkqp. "tgugctej "cuukuvcpeg." i tco o ct "ej gemkpi . "cpf 'hggf dcem'qp"f tchwu. "tcyj gt"\uj cp" cu'c'tgr ncego gpv'hqt "etkkecn'\uj kpmkpi . "qtki kpcn'cpcn{uku."qt"cwj gpvke"xqkeg0

Cml'C Kwug"o wuv'dg"r tqr gtn("f kuenqugf "cpf "eksgf ."y kij "uwwf gpvu"r tqxkf kpi "ergct" f qewo gpvcvkqp"qh"y j kej "vqqnu"y gtg"wugf ."j qy "vj g{ "y gtg"go r m{gf ."cpf "y j cv'r tqo r wı" i gpgtcvgf "vj g"cuukuvcpeg0'Uwwf gpvu"tgo ckp"hwn("tgur qpukdng"hqt"vj g"ceewtce{ ."s wcnkv{ ." cpf "kpvgi tkv{ "qh"vj gkt "uwdo kwgf "y qtm"kpenwf kpi "cp{ "C Ki gpgtcvgf "eqpvgpv."cpf "o wuv'dg" r tgr ctgf "vq"xgtkh{ "kphqto cvkqp."eqttgev'kpceewtcekgu."cpf "f ghgpf "vj gkt"qy p"kf gcu0

Dg"cy ctg"qh"C Ku"uki pkhecpv'ho kc.kqpu"/ "C Kht gs wgpvn("i gpgtcvgu"kpeqttgev'hcevu." pwo dgtu."cpf "gxgp"hcdtkecvgf "ekkc.kqpu"yi cv'o wuv'dg"kpf gr gpf gpvn("xgtkhkgf."y j krg"cn.q" r qvgpvkcm("r tqf wekpi "dkcugf "qt"kpeqo r ngvg"kphqto cvkqp0"Uj qwrf "yi g"WH"Uwf gpv" Eqpf wev'r tqeguu'hkpf "c"uwf gpv'i wkn/("qh'wukpi "C K'vq"i gpgtcvg"uwduvcpvkcni'r qt.kqpu"qh" cuuki po gpvu. "eqo r ngvg"gpvktg"r tqlgevu."qt"d{r cuu'yi g"eqtg"ngctpkpi "qdlgevkxgu."yi ku'y km'

eqpurkwwg''cecf go ke''o kueqpf wev''cpf 'y km'tguwm'kp''r gpcmkgu'tcpi kpi 'htqo ''cuuki po gpv'' hckmtg''vq''eqwtug'hckmtg.''f gr gpf kpi ''qp''y g''ugxgtkx{ ''qh''y g''xkqrcxkqp0

Vgco ut'O cp{"qh'y g"o ckp"cuuki po gpw"ctg"\gco /dcugf 0'Uwf gpw"ctg"cmy gf "\q"hqto "
yi gkt"qy p"\gco "cetquu'\uge\kqpu*eqpukukpi "qh'6'\uwf gpw"r gt \gco ."y ky "r quukdn{"c'hgy "
ygco u'j cxkpi "5"o go dgtu."f gr gpf kpi "qp"\qvcn'eqwtug"gptqmo gpv+"cpf "ugrh/cuuki p"
yi go ugrxgu"\q"qpg"qh'\yi g"\gco u'f guki pcvgf "d{"yi g"kpurt wevqt "kp" yi g"Ecpxcu"eqwtug"ukg0'
Vj ku'o wuv'qeewt "y kyi kp"\yi g"htuv'hgy "y ggmu"qh'\yi g"eqwtug"\curu't tguet kdgf "d{"yi g"
kpurt wevqt +0Qpeg"\yi ku'r tguet kdgf "r gt kqf "gpf u."\yi g"kpurt wevqt "y km'\wug'\yi g"Ecpxcu"u{ uvgo "
vq"tcpf qo n{"cuuki p"\yi g"tgo ckpkpi "uwf gpvu"\yi y q"qr vgf "\q"PQV'ugrh/cuuki p+"kpvq"\ygco u0'
Qpeg"ugv."\yi g"\ygco "urt wewtg"y km'dg'hkpcn'hqt "\yi g"f wtc\kqp"qh'\yi g"eqwtug0

P qvg''y cv'Ecpxcu'tgeqi pk gu''qpn(''y g''vgco u''etgcvgf ''d{ ''y g''kpuvtwevqt''hqt''vgco /dcugf '' cuuki po gpv'i tcf kpi ''r wtr qugu. ''uq''uvwf gpvu''o wuv'dg''cuuki pgf ''vq''qpg''qh''y g''f guki pcvgf '' vgco u0Uwf gpvu''o c{ ''cnuq''hqto ''c''uvwf gpv''qt''r tqlgev'i tqwr ''kp''Ecpxcu''kh'yi g{ ''ej qqug='' j qy gxgt. ''y ku''ku''kpekf gpvcn''q''cpf ''pqv'c''uwduvkwwg''hqt''dgkpi ''cuuki pgf ''vq''qpg''qh''y g'' f guki pcvgf ''vgco u0

Gpi kpggtkpi "ku"c"\gco /dcugf "õur qt vö"kp"o quv'qti cpk cvkqpu0Cu"uwej ."kvøu"ko r qt vcpv'vq" ngctp"\q"y qt m'ghhge vkx gn("kp"uwwf gpv'\gco u."kpenwf kpi "y qt mkpi "\y tqwi j "f khhgt gpegu"cpf "kuuwgu'\y cv'y km'nkmgn("qeewt."\q"et gc vg"c"s wcnkv("uwdo kwcn'y ky kp"c"uej gf wrgf "f grkx gt { "f cvg0Vq"\y ku"gpf ."\y g"gzr gevc\kqpu"hqt"\y g"cuuki po gpv'\gco u"kp"\y ku"eqwtug"ctg" uwo o ctk\ gf "dgmy <

"C"f kthgtgpv'\gco "o go dgt"o wuv'\cng"qp"\j g"tqng"qh'\cum'o cpci gt"\VO +"qp"gcej "\gco / dcugf "cuuki po gpv0"Uq."\j g"tqng"\y km'\uj km'\q"c"f kthgtgpv'\gco "o go dgt"hqt"gcej " cuuki po gpv0"P qvg"\j cv'kp"uqo g"ukwc\kqpu"\g0 0"y j gp"\gco u"eqpukuv'qh'5"o go dgtu"qt" dcugf "qp"\j g"pwo dgt"qh'\gco "cuuki po gpvu+."c"\gco "o go dgt"o c{"j cxg"\q"ugtxg"kp" yj g"VO "tqng"o qtg"\j cp"qpeg"f wtkpi "\j g"ugo guvgt"qt"o c{"pqv'ugtxg"cu"\j g"VO 0

"Vj g"VO "j cu''y g"r tho ct { "tgur qpuldkrk\{" '\q"eqqtf kpcvg"y kyj "'y g"qvj gt"\gco "o go dgtu" kp"\gto u"qh'\y gkt"ur gelkhe "eqpvtkdwkqpu"\q"y g"cuuki po gpv."cpf "'y g"uej gf wrg"\q" f gxgrqr "cpf "eqo r ngvg"\y g"cuuki po gpv0"Vj g"VO "cnuq"j cu''y g"tgur qpuldkrkkgu"hqt<"y g" eqo r ngvgpguu"cpf "s wcrk\{"qh''y g"uwdo kwcri*y j kej "o c\{"dg"f grgi cvgf "\q"cpqyj gt"\gco "o go dgt +="tguqnxkpi "eqphrke wi'y kyj "r ctvkekr cvkqp"ngxgnu"qh'qvj gt"\gco "o go dgt*u+="gpuwtkpi "eqo r ngvkqp"qh'c"\gco "cuuguuo gpv*ugg"dgrqy +="cpf "hqt"o cnkpi "\y g"hkpcn" cuuki po gpv\Ecpxcu"uwdo kwcri)

"Retvlekr cvlpi 'vgco 'o go dgtu'o wuv'dg'rkuvgf 'kp'vj g'j gef gt'hkrg'qh'vj g'cuuki po gpv' f qewo gpv0*Vj g'VO 'hqt'vj g'cuuki po gpv'uj qwrf 'enuq'dg'kf gpvklkgf 'kp'vj g'j gef gt' gpvk {0+'Gxgt {qpg'rkuvgf 'y km'tgegkxg'vj g'uco g'i tef g'hqt'vj g'cuuki po gpv'uwdlgev'vq'vj g'' vgco ''cuuguuo gpv'f guetkdgf ''dgrqy ='vj qug'pqv'rkuvgf 'y km'tgegkxg''c'i tef g'qh'\"o2\"o'hqt'vj g'' cuuki po gpv\"k'ku'wr ''VQ''VJ G''VGCO ''vq''cuuguu'cpf 'f gekf g'kh'cp'kpf kxkf wenzu'' eqpvtkdwkqpu'cpf ''cevkxkv{ ''rgxgni'y gtg''uwhhkekgpv'vq''dg''eqpukf gtgf ''cu'c'r etvkekr cvkpi '' vgco ''o go dgt''cu'f kuewuugf ''o qtg''hwrn{ ''dgrqy 0

"Vgco "Cuuguuo gpvu<"Vgco "o go dgtu"ctg"gzrgevgf "vq"cevkxgn("cpf 'hwm("rctvkekrcvg"kp" yi g"f gxgmqro gpv"qh"gcej "cuuki po gpv"Vj gtg"ku"QPG"uwdo kwcn"rgt "vgco "o cfg"d("vjg" VO 'hqt"gcej "cuuki po gpv."y j kej "ku"i tcfgf."cpf "vjg"i tcfg"crrnkgu"vq"cmivgco "o go dgtu. "uwdlgev"vq"yj g'hqmqy kpi "vgco "cuuguuo gpv"rtqeguu<

Kly qwf "dg"wphckt "q"ygco "o go dgtu."cpf "wpceegr wdrg" 'q"yj g"kputweyt."hqt"cp" kpf kxkf wcn'\q"pqv'o ggv'\j gkt"\gco "qdrki c\kqpu"cpf "{gv'tgegkxg"\j g"uco g"i tcf g"cu'\j g" q\j gt"\gco o c\gu"\qp"cp"cuiki po gp\0\Ki'cp"kpf kxkf wcn'\j cu"xcnkf "gz\gpwc\kpi " ektewo uvcpegu"ko r ce\kpi "\j gkt"r ct\kekr c\kqp."\j g{ "j cxg"\j g"qdrki c\kqp"\q" eqo o wpkec\g"\j ku"\q"\j gkt"\gco "o go dgtu"\p"c"\ko gn\"o cppgt\0P q\g"\j c\v" eqo o wpkec\kpi "kuuwgu"qh'\j ku"pcwtg"c\v'\j g"\openatoruv'o kpwg\openatoruv'o k

Vq"yi ku"gpf."vq"tgegkxg"cp"cuuki po gpv"i tcfg."yi g"vgco "ku"tgs wktgf "vq"eqo r ngvg"c"vgco " r gthqto cpeg"cuuguuo gpv"o cvtkz0"Vj g"cuuki po gpv"vgo r ncvg™Ecpxcu"õHkrguö" hwpevkqp? @Cuuki po gpv"Tguqwtegu"hqnf gt+'eqpvckpu"uwej "c"o cvtkz."cpf "kv'ku"gcej "VO øu" tgur qpukdkrk√{ "vq"o cng"uwtg"yi cv'cm'o go dgtu"eqo r ngvg"yi gkt "r qtvkqp"qh"yi g"o cvtkz0" Gxgt { "o go dgt "qh"yi g"vgco "o wuv'eqo r ngvg"yi g"cuuguuo gpv"kp"qtf gt "vq"j cxg"yi gkt" pco gu"rkungf "kp"yi g"cuuki po gpv"j gcf gt "cu"c"r ctvkekr cvkpi "o go dgt0"Vj ku"o gcpu"hkrnkpi " qw"yi g"nkpg"qh"yi g"o cvtkz"yi cv"j cu"j ku!j gt "pco g"kp"yi g"hktuv'eqnwo p™kp"õo cvtkz" ncpi wci gö. "Gw:ku"o go dgt "Kvu"gxcnwcvkqp"qh"o go dgt "L±"ceeqtf kpi "vq"yi g"hqnny kpi " s wcrkscvkxg"tcvkpi "u{uvgo <

- ~Á322''ó''Vgco ''o go dgt''r ctvkekr cvgf 'kp''cm't gur gevu''f wtkpi ''f gxgmr o gpv''qh'vj g'' cuuki po gpv='cpf ''cm'eqpvtkdwkqpu'y gtg''o cfg'kp''c''vko gn{ ''o cppgt
- ~Á; 2"ó"Vgco "o go dgt"r ct√kekr cvgf "kp"o quv'tgur gevu'f wtkpi "f gxgmqr o gpv'qh'vj g" cuuki po gpv="cpf" cm'eqpvtkdwkqpu'y gtg"o cf g'kp"c'\ko gn{ "o cppgt
- ~Á: 2"ó"Vgco "o go dgt"r ctvkekr cvgf "vq"uqo g"f gi tgg"f wtkpi "f gxgmqr o gpv'qh'vj g" cuuki po gpv="qt"uqo g"eqpvtkdwkqpu"y gtg"pqv'o cf g"kp"c"vko gn("o cppgt
- ~Á92"ó"Vgco "o go dgt"r ctvkekr cvgf "qpn("vq"c"rko kgf "f gi tgg"f wtkpi "
 f gxgrqr o gpv'qh'vj g"cuuki po gpv="qt"uqo g"qt"cm'eqpvtkdwkqpu'y gtg"pqv'o cf g"
 kp"c"vko gn("o cppgt
- ~Á2"ó"Vgco "o go dgt"f lf "pqv"r ct vlekr cvg

Vj g"VO 'o wuv'ennq'ecnewney"cpf "tgeqtf "ý g"<u>exstei g"texk</u>pi 'hqt "geej "kpf kxkf wenlkp"ý g" f guki pevgf "ur ceg "kp"ý g"o extkz "cpf "gpuwtg"ý ev'ý g"ygeo "eqpxgpgu"vq"ci tgg"y ký "ý g" eqpvgpv"kp"ý g"cuuki po gpv. "kpenwf kpi "ý g"eqpvgpv"qh"ý g"cuuguuo gpv'o extkz. "r tkqt"vq" uwdo kwen0

Gcej "gco "o go dgt 'y km'j cxg''y gkt "cxgtci g'r gtegpvci g"cuuguuo gpv'ueqtg"cr r nkgf "q" y g" gco "i tcf g"qp"gcej "cuuki po gpv0Hqt"gzco r ng. "kh'c" gco "o go dgt "tgegkxgu"cp" cxgtci g"cuuguuo gpv'ueqtg"qh'!: 2' "qp"cp"cuuki po gpv."cpf "y g" gco "i tcf g"qp"y cv' cuuki po gpv'ku"; 2. "y gp"y cv' gco "o go dgt øu'i tcf g"qp"y g"cuuki po gpv'y km'dg" tgeqtf gf "cu'94"*; 2"z "20 2+0

 $S wk \mid guk'S wk \mid gu'y kni'dg''cp''qr gp/dqqm''qr gp/pqvg''hqto cv'cpf "WHJ qpqt''Eqf g'' \\ r tqxkukqpu''cr r n(0'Uwf gpwi'y kni'eqo r ngvg''y g''s wk \mid gu''gngevtqpkecm(''y tqwi j ''y g''Ecpxcu'' eqwtug''y gdukvg'y ky kp''r tguetkdgf ''r gtkqf u''kp''y g''eqwtug''uej gf wrg''y cv'y g''s wk ''ku'' cxckrcdrg0'Uwf gpwi''ctg''gpeqwtci gf ''vq''wc { ''qp''vqr ''qh''y g''Ecpxcu''eqwtug''ecngpf ct.''y j kej '' eqpvckpu''cm''s wk ''f cvgu''cpf ''vko gu0'Vj g''kpuvtwevqt''o c { ''cnnq''knuwg''tgo kpf gtu''cdqw''s wk '' f cvgu''cpf ''eqxgtci g0$

P q"o cng/wr "s wkt | gu'y km'dg"cxckrcdrg. "uwdlgev'\q"WH'cwgpf cpeg"r qnkekgu0'Ugg"<u>WH</u>" cwgpf cpeg"r qnke{ "kp"vj g"WH'ecvcrqi 0

Cunki po gpvu-"Vj gtg"y kni'dg"wr "vq"ugxgp"hcti gt"Ecpxcu"cunki po gpvu"yi tqwi j qw"yi g" ugo guvgt."qh"y j kej "qpg"ku"yi g"kpf kxkf wcn"Y ggmn{ "T gcf kpi "Kpuki j wi "o qtg"kphqto cvkqp" dgmy +0O quv'qh"yi g"cunki po gpvu"ctg"vgco /dcugf 0Gcej "cunki po gpv"kpenwf gu"kpunt wevkqpu" hqt"r tgr ctcvkqp. "kpenwf kpi "yi g"tgngcug"cpf "f wg"f cvgu0O ketquqhv" O U+"Y qtf "vgo r ncvgu"ctg" r tqxkf gf "hqt"uwxf gpv"tgwug"kp"r tgr ctkpi "yi gug"uwdo kwcnu" "gzegr v"hqt"yi g"y ggmn{ "tgcf kpi " kpuki j vu"uwdo kwcnu"y j gtg"vgzvdqz"gpvt{ "hqto cv'ku"ceegr vcdng+0"Uwxf gpvu"uj qwrf "gzr gev'c" o kpko wo "32" "i tcf g"r gpcnv{ "hqt"hcknxtg"vq"hqmy "cmlkpuxt wevkqpu"kpf kecvgf "qp"yi g" ygo r ncvgu"cpf "yi g"ur gekhke"cunki po gpvu" "cu'cr r nkecdng+0S wcnkv{ "gzr gevcvkqpu"hqt"cmi' y tkwgp"cunki po gpvu"gzknv="tghgt"vq"yi g"Gzr gevcvkqpu"hqt"S wcnkv{ "qh"Y qtm'ugevkqp"dgnqy " hqt"o qtg"kphqto cvkqp0

I tef wevg'uwf gpvu'y kni'eqo r ngvg''c'ur gekeni'cuuki po gpvi'cu'r etv'qhi'yi g''i tef wevg''eqwtug'' tgs wktgo gpvu0'Vj ku'ku'tgnevgf ''vq''yi g''ecug''uwf { "qpnkpg''uko wnevkqp'r cennci g''o gpvkqpgf ''kp'' Ugevkqp''8'qhi'yi g''u{ ncdwu0'Vj g''kpuvtwevqt''y kni'r tqxkf g''o qtg''kphqto cvkqp''cdqw''yi ku'' cuuki po gpvi'ev'ep''er r tqr tkevg''vko g''f wtkpi ''yi g''ugo guvgt0

Cu'r tgxkqwun("gzr nckpgf ."r ctvkekr cvkpi "vgco "o go dgtu"o wuv'dg"hkungf "kp" yj g"j gcf gt "hkug"qh" yj g"cuuki po gpv"f qewo gpv0"*Vj g"VO "hqt" yj g"cuuki po gpv"uj qwrf "cnuq"dg"kf gpvkhkgf "kp" yj g" j gcf gt "gpvt {0+"Gxgt {qpg"nkungf "y km"tgegkxg" yj g"uco g"vgco "i tcf g"nqt" yj g"cuuki po gpv" kpf kxkf wcn"cuuki po gpv"i tcf gu"y km"dg"uwdlgev" yj g"vgco "cuuguuo gpv"r tqeguu"r tgxkqwun("f guetkdgf 0"Vj qug"pqv"nkungf "y km"tgegkxg"c"i tcf g"qh"ö2ö"hqt" yj g"cuuki po gpv0"Pq"ncvg" cuuki po gpvu"y km"dg"ceegr vgf ."uwdlgev" y"WH"cwgpf cpeg"r qrke {0

Tgs wgunul*kq'ij g'kpuntwevqt'qt'i tcf gtu'y j q'o c { "cunkn'ij g'kpuntwevqt+'hqt'ceegr wpeg'qh" ncvg'uwdo kwcnu'*f wg''q'ttcxgn'uej gf wgu. 'r qy gt'qwci gu. 'uko krct'f wg'f cvgu'hqt'o wnkr ng'' encuu'cunki po gpvu. 'vgej pqmi { "o chwpevkqpu."qt "uko krct'knuwgu+'y km'pqv'dg''eqpukf gtgf 0'Ki'' c'uwf gpv'tgur qpukdng'hqt'o cmkpi "c'vgco "uwdo kwcn'dgnkgxgu'ij cv'c'Ecpxcu'tgncyf 'knuwg'' y cu'iy g'ecwug''qh'iy g'ncvg'uwdo knukqp. 'vj gp'kv'ku'iy cv'uwf gpvu'tgur qpukdkrk\{ "vq'f knewnu'' y g'knuwg''y kij "iy g'WHJ GNR'F gum'cpf 'hqmqy/wr 'y kij "iy g'kpuntwevqt'wr qp'iy gkt'tguqnwkqp'' y cv'c'Ecpxcu'knuwg'y cu'kp'hcev'kpxqnxgf 0'Vj g'kpuntwevqt'y km'o cng'iko g''gzvgpukqpu'hqt'' uwxf gpvu'j cxkpi "qi gt'ngi kko cvg'tgcuqpu'*fqt"gzco r ng. "c'f qewo gpvgf 'j gcnij 'knuwg+'hqt''c'' ncvg'uwdo kwcn0

Vj g"eqwtug"cuuki po gpvu"ecp"dg"wtpgf "kp"cv"cp{ "r qkpv"f wtkpi "vj g"qr gp"r gtkqf "cpf "gctn(" uwdo kwcni"ctg"gpeqwtci gf ."cu"hgcukdng0Co r ng'\ko g"ku"r tqxkf gf "\q"eqo r ngvg"vj gug" cuuki po gpvu"cpf "vj g"ej qkeg"qh'uwdo kwcn'\ko g"ku"wr "\q"vj g"\gco u0

"Y ggmm\"Tgcf kpi "Kpuki j wi "kpf kskf wcn+Ccej" y ggm"cm'uwf gpwi'ctg" tgs wktgf "vq" uwdo kv'y gkt"Y ggmm\"Tgcf kpi "Kpuki j vu 'y kyi "tghnge kqpu"qp"c"ngcf gtuj kr/tgncvgf" ctvkeng"r quvgf "d{"y g"kpuntwe vqt0'Uwf gpv'tgur qpugu"vq"y g"uvcpf ctf "cuuki po gpv' s wgunkqpu"y km'dg"gpvgtgf "kp"y g"vgzv'dqz "qh"gcej "y ggmm\"cuuki po gpv0'Vj gug"y ggmm\" cuuki po gpv0'Vj gug"y ggmm\" cuuki po gpv0'Vj gug"y ggmm\" cuuki po gpv1' tcf g. "y kyi "Vj g"hkpcn'i tcf g"hqt"y ku"cuuki po gpv'eqttgur qpf kpi "vq"y g" tcvkq"qh'y g"pwo dgt"qh"cuuki po gpvu"cewcm\"uwdo kwgf "vq"y g"pwo dgt"qh'y ggmm\" cuuki po gpvu'tgs wktgf 0

"Rkej Xcpvci g"Cuuki po gpvu" *kpf kxkf wcn+<"Vj gtg'y km'dg"wr "vq'7" kpf kxkf wcn'cuuki po gpvu" cuuqekcvgf "y kaj "wug"qhi'yi g"Rkej Xcpvci g" *RX+"r tgugpvcvkqp" tckpkpi "uqhwy ctg0" Vj g" uqhwy ctg"u{uvgo "j gnr u'uwwf gpvu"r tcevkeg"cpf "kortqxg" y gkt "xgtdcn'r tgugpvcvkqp" umkmu"cpf "r tqxkf gu'lpuvcpv'hggf dcem'vq" j gnr "uwwf gpvu"kortqxg0"Rtgugpvcvkqpu"ctg"

o cf g"lp"htqpv"qh"c"uko wrcvgf "cwf kgpeg" ij cv"tgcevu"dcugf "qp" j qy "y gm"gcej "uwf gpv" r tgugpvu0Chvgt "gcej "r tcevkeg" uguukqp. "ij g"RX" u { uvgo "ueqtgu" ij g"r tgugpvcvkqp" f grkxgt { "cpf" r tqxkf gu" vkr u0RX" cnuq" j cu" 52" xkf gq" wwqtkcnu" eqxgtkpi "gxgt { "r tgugpvcvkqp" unkm" y cv'uwf gpvu" ecp" tgxkgy "cp { 'vko g0

Vj g'Ecpxcu'RX''cuuki po gpwi'dwkaf "qp"gcej "qvj gt."y kaj "vj g''r tko ct { "qdlgevkxg''dgkpi "vq" ko r tqxg''uwkf gpv''xgtdcn'eqo o wpkecvkqpu''umkmu0'Vj gug''cuuki po gpwi'y km'dg"gxcnwcvgf "qp"c"eqo r ngvg'lkpeqo r ngvg''dcuku."cpf "uwwf gpwi'y km'pggf "vq"o ggv''vcti gv'qdlgevkxgu''hqt" gcej "cuuki po gpv'kp"qtf gt "vq"dg"eqpukf gtgf "eqo r ngvg0'Uwxf gpwi'y km'r tqxkf g" kphqto cvkqp"tgs wguvgf 'wukpi "vj g''vgzv'dqz'kp"gcej "cuuki po gpv0

'Cm'qyi gt 'cuuki po gpvi<

- ~Áy km'dg"gxcnwcvgf "ci ckpuv't wdtkeu" y cv'y km'dg"cxckrcdrg"cpf "gcej "cuuki po gpv" r ci g'kp'Ecpxcu
- ~Áo wuv'dg'r tgr ctgf 'wukpi ''yi g'O U''Y qtf ''cuuki po gpv'\go r ncvgu'r tqxkf gf =''yi gug'' cuuki po gpvu'o wuv'dg'uvdo kwgf 'kp'r f h'hqto cv
- ~Ávgco "cuuki po gpv'uwdo kwcnı"o wuv'kpenwf g"vj g"eqo r ngvgf "vgco "cuuguuo gpv" o cvtkz "cu'r tgxkqwun("f kuewnugf
- ~Áqpn("qpg"cuuki po gpv'uwdo kuukqp"r gt "vgco "ku"t gs wkt gf "*VO "t gur qpukdkrkv(+

"Gzr gevcvkqpu"hqt"S wcrkv("qh"Y qtm*Ghgevkxg"y tkwpp"eqo o wpkecvkqpu"ctg"cp" korqtvcpv'r ctv'qh"dgkpi "cp"gpi kpggt."gpi kpggtkpi "rgcf gt"cpf "r tqhguukqpcn)"Y j krg" uwwf gpw"ctg"pqv"gzr gevgf "vq"dg"cdrg"vq"y tkvg"hkng"Gpi rkuj "o clqtu"qt"ceeqor rkuj gf" cwj qtu."cm"uwwf gpw"ctg"gzr gevgf "vq"vcng"uwhhkekgpv"ectg"vq"r tqf weg"cuuki po gpv" uwdo kwcnu"vj cv'tghrgev'c"eqnrgi kcvg"qt"y qtnkpi "r tqhguukqpcn"rgxgn"qh"ghrqtv"kp"vgto u"qh" eqor qukkkqpcn"uxtwewtg"cpf "eqttgev"i tcooct"wuci g0"Vq"vj ku"gpf."vj g"kpuntwevqtøu" gzr gevcvkqpu"hqt"cm"cuuki po gpv"uwdo kwcnu"ctg"qwwkpgf "dgnqy <

- "Uwf gpul'y kni'cng"qy pgtuj kr "qhi'r tqf wekpi "j ki j /s wcrkx{ "cuuki po gpv" of grkxgtcdrguö''y cv''y g{ "y qwrf 'uwdo kv''q "y gkt "go r rq{gt0
- "Uwdo kwcnı'y kn'tghrgev'i qqf."eqo o qp'r tcevkeg'kp'f gxgmr kpi "r ctci tcr j u'cpf" ugpvgpegu'*uwej "cu'qpg"vqr ke'r gt'r ctci tcr j. "wug'qh'eqo r ngvg'ugpvgpegu'cpf "pqv' htci o gpw."qpg'iy qwi j v'r gt'ugpvgpeg'iy cv'uwr r qtwu'iy g'r ctci tcr j "vqr ke." eqpukuvgpv'hqpvu'cpf 'untwewtg. "gve0+01 qqf "eqo o qp'r tcevkeg'hqt'iy ku'eqwtug'f qgu" pqv'lpenvf g'tgur qpugu'iy cv'kpxqrxg'nqpi "dnqemu'qh'vgzv'eqpvckpkpi "o wnkr ng'vqr keu0
- "Uwf gpwi'y kni'wug'uvcpf ctf 'tguqwtegu'cxckrcdrg''y tqwi j 'O U'Y qtf '*qt'qvj gt" ceegr vcdrg'uqwtegu+'vq'ugctej 'hqt'cpf 'eqttgev'i tco o cwecn'kuuwgu'r tkqt''vq'' cuuki po gpv'uwdo kwcn0'Uwdo kwcnu'yi cv'eqpvckp'pqvkegcdrg'o kuur gnrgf 'y qtf u." kpeqo r rgvg'ugpvgpegu'cpf 'uko krct'ectgrguu'kuuwgu'y kni'dg'eqpukf gtgf 'c'pqp/ r tqhguukqpcn'uwdo kwcni'cpf 'uwdlgev'vq'c'o kpko wo '32' 'i tcf g'r gpcnv{ 0*Vj ku'o c{ "dg'kp'cff kkqp''vq''yi g'i tcf g'r gpcnv{ "cuuki pgf 'hqt'pqv'hqmqy kpi "cuuki po gpv'' kput wevkqpu0+'Vj g''s wcrkv{ "qhi'vgco /dcugf 'uwdo kwcni'ku'c'uj ctgf 'tgur qpukdkrkv{ "co qpi ''yi g''yco 'o go dgtu0
- "Vgco /dcugf 'uwdo kwcnı'o gcp''y cv''y g'f qewo gpv'tghrgevu'c''ygco "eqo r krcvkqp"qh" eqpvtkdwkqpu. "gpf qtugf "d{ "cm'r ctvkekr cvkpi "ygco "o go dgtu0'Kp''hkpcnk kpi "y g"

uwdo kwcn'tgo go dgt''yj cv''yj gtg''ku''pq''ŏKkp''\gco ö''cpf ''uwdo kwcnu''uj qwrf 'tghrgev'' yj ku''eqpegr v'd{ ''tgo qxkpi ''y qtf u''*'uwej ''cu''ōKô''qt''ŏo gö+''yj cv'tghrgev''qpn{ ''kpf kxkf wcn'' r gtur gevkxgu.''wprguu'\yj g{ ''s wguvkqp''cumu'hqt'kpf kxkf wcn''yco ''o go dgt''tgur qpugu0

"Uqwteg"cpf "tghgtgpeg"hkn/kpi u"o c{"dg"tgs wktgf 'hqt"uqo g"cuuki po gpv'uwdo kwcnı0' Cuuki po gpvu'\j cv'hckn'\q"kpenwf g"tghgtgpegu."cu"o c{"dg"tgs wguvgf ."y km'dg" eqpukf gtgf "kpeqo r ngvg"cpf "uwdlgev'\q"c"o kpko wo "32' "i tcf g"r gpcn/{0*Vj ku"o c{"dg"kp"cf f kwqp"\q"i tcf g"r gpcn/kgu"cuuki pgf "kpuvt wevkqpcn'qt"s wcnkv{/dcugf" tgcuqpu0+

"Vq"gpuwtg"yj cv"cuuki po gpw"ctg"y gm'untwewtgf "cpf "ectghwm("y tkwgp."uwf gpw" ctg"gpeqwtci gf "vq"cxckil'yj go ugnxgu"qhl'yj g"<u>Wpkxgtukv("qh"Hnutkf cøu"y tkkpi "uwwf kq"</u> yj cv"qhhgtu"htgg"qp/eco r wu"cpf "qpnkpg"y tkkpi "cuukurcpeg"qp"y tkkpi "r tqlgew"cpf" ku"cxckrcdng"vq"uwwf gpwu"qh"cmingxgnu0"Vj g"kpuntwevqt"engctn("wpf gturcpf u"vj cv" Gpi nkuj "o c{"pqv'dg"yj g"hktuv'ncpi wci g"qh'o cp{"uwwf gpwu"cv'yj g"Wpkxgtukv{"qh" Hnutkf c0U qy gxgt."vj ku"hcev'ku"pqv'cp"gzewug"hut"r qqtn("untwewtgf "cpf "ectgnguun(" y tkwgp"cuuki po gpv'uwdo kwcnu0'Cr r qkpvo gpw"y kj "vj g"uwwf kq"urchh"ctg"untqpi n(" gpeqwtci gf 0'Ecm"\$774+": 68/335: "hut"o qtg"kphqto cvkqp0

350' Gxcnwcvkqp"qh'I tcf gu<"Y gki j vkpi u''qh''gcej "eqwtug"eqo r qpgpv'hqt"f gvgto kpcvkqp"qh'hkpcn' eqwtug'i tcf gu''ctg''kpf kecvgf "dgrqy <

		Y gki j vkpi "
Eqo r qpgpw	Rqkpvu	Rgtegpwi g"
Едо г друрш	Тұрш	qh'Hopen'I tefg
encuu'r tgr ctcvkqp"cpf" r ctvkekr cvkqp	"y ggmn("r qkpvu" *xctkcdrg+"tgrcvgf "vq" u{ pej tqpqwu'y ggmn("encuu'uguukqpu" yj cv'y km'dg"j gnf	42'
Kpf kxkf wen'Ngef gtuj kr Fgxgnqr ogpv'Rnep	"42"r qkpvu"*o czko wo +'hqt 'kpkkcn' uwdo kwen ": 2"r qkpvu'*o czko wo +'hqt 'hkpen' uwdo kwen	42'
s wk gu'*wr ''vq'8+	"o czko wo "r qkpwi'y km'xct { "d { "s wk	47'
o ckp"cuuki po gpvu'*wr 'vq'9+	"322'r qkpul'*o czko wo +'gcej	47'
*kpenwf kpi ''y g''ur gekcn'' i tcf wcvg''cuulki po gpv+	Eqo dkpgf "Y ggmn("Tgcf kpi "Kpuki j vu" ueqtg"y km'eqwpv'cu"3"cuuki po gpv	
oc{"kpenwfg"rtgugpvcvkqpu *wr"vq"4+		
Rkej Xcpvci g'r tgugpvcvkqpu'' *wr 'vq'7+	'eqo r ngvg kpeqo r ngvg'*32'r qkpvu'' gcej +	32'
	Vqwik	322'

360I tcfkpi 'Rqnke{<

Vj g'hkpcn'eqwtug'i tcf g'*cu'c'\qvcn'r gtegpvci g'tqwpf gf '\q''y g''pgctguv'\gpyj u''qh'c''f ki kz+" y km'dg''eqo r ctgf ''ci ckpuv'y g'hqmqy kpi 'i tcf g''uecng<

C"?"; 5"qt"cdqxg	E"? '9502'6'980	
, 1 1 0	[· · · · · · · · · · · · · · · · · · ·	

C/"?"; 202"6"; 40,	E/"? '9202''6'940
D- "?": 902"6": ; 0;	F - "? '89@'6'8; Q
D"?": 502"6": 80	F"?'85@'6'880
D/"? ": 202"6": 40,	F/"?''8202''6''840
E- "? '9902'6'9; Q	G'? '7; 0; ''qt''dgmy

O qtg"kphqto cvkqp"qp"WH"i tcf kpi "r qrke{"o c{"dg"hqwpf"cvc WH"I tcf wcvg"Ecvcrqi I tcf gu"cpf "I tcf kpi "Rqrkekgu

- 370' Uwf gpui'Tgs wktkpi "Ceeqo o qf cvkqpu<'Uwf gpui'y kij "f kucdkrkkgu'y j q"gzr gtkgpeg" ngctpkpi "dcttkgtu'cpf "y qwrf "rkng"vq"tgs wguv'cecf go ke "ceeqo o qf cvkqpu"uj qwrf "eqppgev'y kij "yj g"f kucdkrkv{ "Tguqwteg"Egpvgt"d{ "xkukkpi "

 <u>j wr uslif kucdkrkv{ 0xhr0rf whrwf gpvuli gv uvct vof 10 Krku"</u>ko r qtvcpv'hqt"uwf gpvu"vq"uj ctg"

 yj gkt"ceeqo o qf cvkqp"rgvygt"y kij "yj gkt"kpuvt wevqt "cpf "f kuewuu"yj gkt "ceeguu"pggf u. "cu"

 gctn{"cu'r quukdng"kp"yj g'ugo guvgt0
- 390' Kp/Encuu'T geqtf kpi <'Uwf gpwl'ctg'cmqy gf "\q"tgeqtf "xkf gq"qt"cwf kq"qhl'encuu'ngewtgu0' J qy gxgt. "\j g"r wtr qugu'hqt"y j kej "\j gug'tgeqtf kpi u'o c{ "dg'wugf "ctg'untkevn{ "eqpvtqmgf 0'Vj g"qpn{ "cmqy cdmg"r wtr qugu''ctg'*3+"hqt"r gtuqpcn'gf weckqpcn'wug. "\4+"kp" eqppgevkqp"y kj "c"eqo r nckpv'\q"\j g"wpkxgtukv{."qt"\5+"cu"gxkf gpeg"kp. "qt"kp"r tgr ctcvkqp" hqt. "c"etko kpcn'qt"ekxkn'r tqeggf kpi 0'Cm'qvj gt'r wtr qugu''ctg'r tqj kdksgf 0'Ur gekhlecm{."uwf gpwl'o c{ "pqv'r wdrkuj "tgeqtf gf "ngewtgu'y kj qwl'vj g"y tkwgp"eqpugpv'qh'vj g" kput wevqt0

C'öercuu'rgewtgö'ku'cp''gf weckqpcri'r tgugpvckqp'kpvgpf gf "vq'kphqto "qt'vgcej "gptqmgf" uwf gpwi'cdqwi'c'r ctrkewrct'uwdlgev'kpenwf kpi "cp{'kpurtwevqt/ngf 'f kuewurkqpu''yi cv'hqto " r ctv'qh''yi g''r tgugpvckqp."cpf 'f grkxgtgf 'd{"cp{'kpurtwevqt''j ktgf 'qt"crrqkpvgf 'd{"vj g" Wpkxgtukv{."qt"d{"c'i wguv'kpurtwevqt."cu''r ctv'qh'c'Wpkxgtukv{ "qh'Hrqtkf c'eqwtug0'C'ercuu'' ngewtg'f qgu''pqv'kpenwf g''rcd''ugurkqpu."uwf gpv'r tgugpvckqpu."erkpkecri'r tgugpvckqpu'' uwej "cu''r crkgpv'j krvqt{."cecf go ke"gzgtekugu'kpxqrxkpi "uqrgn{"uwf gpv'r ctrkekr crkqp." cuuguro gpwi''s wki | gu. "kguvu."gzco u+."hkgrf "ttkru."r tkxcvg''eqpxgtuckqpu''dgwy ggp" uwf gpwi'kp'yj g''ercuu'qt''dgwy ggp''c''uwf gpv'cpf 'yj g'hcewn{"qt''ngewtgt''f wtkpi "c''ercuu'' ugurkqp0

Rwdrlecvlqp'y kij qw'r gto kuulqp"qh''y g'kpurtwevqt'ku'r tqj kdkgf 0'Vq"õr wdrkuj ö'o gcpu''vq" uj ctg. ''tcpuo ks. ''ektewrcvg. ''f kurtkdwg. ''qt'r tqxkf g''ceeguu''vq''c 'tgeqtf kpi . ''tgi ctf rguu''qh'' hqto cv'qt''o gf kwo . ''vq''cpqvj gt''r gtuqp''*qt''r gtuqpu+; ''kpenwf kpi ''dw''pqv'tho kgf ''vq'' cpqvj gt''uwf gpv'y kj kp''y g''uco g''ercuu''ugevkqp0Cf f kkqpcm(. ''c''tgeqtf kpi . ''qt''tcpuetkr v''

qh'c'tgeqtf kpi .'ku'eqpukf gtgf 'r wdrkuj gf 'kh'kk'ku'r quvgf 'qp'qt''wr rqcf gf ''\q.'kp'y j qrg'qt''kp'' r ctv.'cp{ "o gf kc''r rcvhqto .'kpenwf kpi ''dwv'pqv'rko ksgf ''\q''uqekcri'o gf kc.''dqqm''o ci c| kpg." pgy ur cr gt.''rgchrgv.''qt''y ktf 'r ctv\{ "pqvg kwvqtkpi "ugtxkegu0C''uvwf gpv'y j q'r wdrkuj gu''c'' tgeqtf kpi "y ksj qww'y tkwgp''eqpugpv'o c\{ "dg''uvdlgev'\q''c''ekxkri'ecvug''qh''cevkqp''kpuvkswgf '' d\{c''r gtuqp''kplwtgf ''d\{ "vj g''r wdrkecvkqp''cpf lqt''f kuekr rkpg''vpf gt''WH'Tgi wrcvkqp''60262'' Uwf gpv'J qpqt''Eqf g''cpf ''Uwf gpv'Eqpf wev'Eqf g0

- 3: 0' Wpkxgtuk{'J qpguv{'Rqrke{<"WH'uwf gpui'ctg'dqwpf'd{'Vj g'J qpqt'Rrgf i g'y j kej " uvcygu."öY g."yj g'o go dgtu'qh'yj g'Wpkxgtukv{"qh'Hrqtkf c'eqo o wpkv{.'r rgf i g'vq'j qrf " qwtugrxgu'cpf "qwt'r ggtu'vq''y g'j ki j guv'uvcpf ctf u'qh'j qpqt''cpf 'hpvgi tkv{ "d{"cdkf kpi "d{" y g'J qpqt''Eqf g0\Qp''cm'y qtm'uwdo kwgf 'hqt''etgf kv'd{"uwf gpui'cv'yj g'Wpkxgtukv{"qh" Hrqtkf c."yj g'hqmqy kpi "r rgf i g'ku'gkyj gt'tgs wktgf "qt'ko r rkgf <\"oQp''o {"j qpqt."Kj cxg" pgkyj gt"i kxgp''pqt''tgegkxgf 'wpcwj qtkl gf 'ckf 'hp'f qkpi "yj ku''cuuki po gpv\"o'Vj g'J qpqt" Eqf g'\"\ wrudlueetff uq\undurl\"of whrtqeguuluwf gpv\eqpf we\eqf g H'ur gekhkgu''c'pwo dgt''qh'' dgj cxkqtu''yj cv'ctg'kp'xkqrc\qp'qh'yj ku''eqf g''cpf "yj g''r quukdrg'ucpe\qqpu\UHwtyj gto qtg." {qw''ctg''qdrki cvgf ''q'tgr qtv'cp{ "eqpf kkqp''yj cv'hcekrkcvgu''cecf go ke''o kueqpf wev'q'' crrtqrtkcvg''r gtuqppgr\"o'Kd'\qv''j cxg''cp{ "s wguvkqpu''qt "eqpegtpu."r rgcug''eqpuwrv'y kyj "yj g'' kputwevqt''qt''\Cu'\kp''yj ku''ercuu0
- 3; 0' Eqo o ko gpv'vq'c''Uchg'cpf 'Kpenwikxg''Ngctpkpi 'Gpxktqpo gpv<'Vj g'J gtdgtv''
 Y gtvj gko 'Eqmgi g''qh'Gpi kpggtkpi 'xcnwgu''xctkgf 'r gtur gevkxgu''cpf 'rkxgf ''gzr gtkgpegu''
 y kyj kp''qwt ''eqo o wpk\{ ''cpf 'ku''eqo o kwgf ''vq''uwr r qtvkpi ''vj g''Wpkxgtukv{ øu''eqtg''xcnwgu."
 kpenwf kpi ''vj g''grko kpcvkqp''qh'f kuetko kpcvkqp0'Kv'ku''gzr gevgf ''vj cv''gxgt { ''r gtuqp''kp''vj ku''
 encuu''y km'vtgcv''qpg''cpqvj gt''y kvj ''f ki pkv{ ''cpf ''tgur gev'tgi ctf nguu''qh'tceg."etggf ."eqnqt."
 tgrki kqp. ''ci g. ''f kucdkrkv{ .'ugz. 'ugz wcn'qtkgpvcvkqp. ''i gpf gt''kf gpvkv{ ''cpf ''gzr tguukqp."
 o ctkcn'uvcwu. ''pcvkqpcn'qtki kp. 'r qrkvkecn'qr kpkqpu''qt ''chhkrlcvkqpu. 'i gpgvke''kphqto cvkqp."
 cpf ''xgygtcp''uvcwu0

Khi'{qwi'nggni'nkng''{qwt 'r gthqto cpeg'l\p'encuu'ku''dgl\pi 'ko r cevgf ''d{ ''f kuetko kpcvkqp''qt'' j ctcuuo gpv'qh''cp{ ''nkpf .''r ngcug''eqpvcev''{qwt''kpuvtwevqt''qt''cp{ ''qh''yj g''hqmqy kpi <

- É' [qwt"cecf go ke"cf xkuqt"qt"I tcf wcvg"Rtqi tco "Eqqtf kpcvqt
- É' JYEQG'J wo cp'Tguqwtegu.'574/5; 4/2; 26.'uwf.gpv/uwr.qtv/jtB.gpi.0whr0rf.w_
- É' Ft0Rco 'Fkentgm' Cuuqekcyg' Fgcp'qh' Uwfgpv' Chrcktu. '574/5; 4/4399. '<u>r rf. B. whr0pf w</u>
- É' Ft0'Vquj kmc| w'P kuj kf c. 'Cuuqekcvg'F gcp'qh'Cecf go ke'Chrcktu. '574/5; 4/2; 65." pkuj kf cB_gpi (whrlef w
- 420' Uqhy ctg"Wug<"Cm'hcewn{ ."uvchh "cpf "uwf gpwl'qh'y g"Wpkxgtuk{ "ctg'tgs wktgf "cpf "
 gzr gevgf "vq"qdg{ "y g'hcy u'cpf "rgi cn'ci tggo gpwl'i qxgtpkpi "uqhy ctg'wug0'Hckrwtg'vq"f q"
 uq"ecp"rgcf "vq"o qpgvct { "f co ci gu"cpf lqt"etko kpcn'r gpcnkgu"hqt "y g"kpf kxkf wcn'xkqrcvqt0'
 Dgecwug"uwej "xkqrcvkqpu"ctg"cnuq"ci ckpuv'Wpkxgtukx{ "r qnkekgu"cpf "twrgu. "f kuekr nkpct { "
 cevkqp"y km'dg"vcngp"cu"cr r tqr tkcvg0'Y g."y g"o go dgtu"qh'y g"Wpkxgtukx{ "qh"Hrqtkf c"
 eqo o wpkx{ ."r ngf i g"vq"wr j qnf "qwtugnxgu"cpf "qwt"r ggtu"vq"y g"j ki j guv'uvcpf ctf u"qh"
 j qpguv{ "cpf "kpvgi tkx{ 0
- 430' Uwf gpv'Rtkxce{ "Vj gtg"ctg"hgf gtcn'hcy u'r tqvgevkpi "{qwt"r tkxce{ "y kij "tgi ctf u'vq" i tcf gu"gctpgf "kp"eqwtugu"cpf "qp"kpf kxkf wcn'cuuki po gpw0Hqt"o qtg"kphqto cvkqp." r ngcug'ugg <u>"y v usltgi kvtet0vhqf whatr c() vo n</u>
- 440' Eco r wu'T guqwtegu<

J geny 'cpf 'Y gnpguu

WO cwgt."Y g"Ectg"[qwt"y gm'dgkpi "ku"ko r qtvcpv'\q"yi g"Wpkxgtuk\{ "qh"Hnqtkf c0"Vj g"WO cwgt." Y g"Ectg"kpkkcvkxg"ku"eqo o kwgf "\q"etgcvkpi "c"ewnwtg"qh"ectg"qp"qwt"eco r wu"d { "gpeqwtci kpi " o go dgtu"qh"qwt"eqo o wpk\{ "\q"nqn"qwv"hqt"qpg"cpqyi gt"cpf "\q"tgcej "qwv"hqt"j grr "kh"c" o go dgt "qh"qwt"eqo o wpk\{ "ku"kp"pggf 0K6"{ qw'qt"c"htkgpf "ku"kp"f kuvtguu."r ngcug"eqpvcev" wo cwgtB whrlef w"uq"yi cv'yi g"WO cwgt."Y g"Ectg"Vgco "ecp"tgcej "qwv"q"yi g"uwf gpv"kp" f kuvtguu0C"pki j wko g"cpf "y ggngpf "etkuku"eqwpugnqt"ku"cxckrcdng"d { "r j qpg"cv\574/5; 4/37970' Vj g"WO cwgt."Y g"Ectg"Vgco "ecp"j grr "eqppgev'uwf gpu"\q"yi g"o cp{ "qyi gt"j grr kpi "tguqwtegu" cxckrcdng"kpenwf kpi ."dw'pqv'nko kgf "\q."Xkevko "Cf xqecvgu."J qwukpi "uvchh"cpf "yi g"Eqwpugnkpi " cpf "Y gnpguu"Egpvgt0Rngcug"tgo go dgt"yi cv'cumkpi "hqt"j grr "ku"c"uki p"qh"uvtgpi yi 0Kp"ecug"qh" go gti gpe { ."ecmi'; /3/30

Eqwpugrkpi "cpf "Y gmpguu'Egpvgt<<u>j wr u<leqwpugrkpi 0whr0gf w.</u>"cpf "5; 4/3797="cpf "vj g" Wpkxgtukv["Rqrkeg'F gr ctvo gpv<5; 4/3333"qt"; /3/3"hqt"go gti gpekgu0

Ugzwen'F kuetko kpevkqp." J eteuuo gpv. 'Cuucwnv." qt "Xkqrgpeg Ki" {qw'qt" c'htkgpf "j eu'dggp'uwdlgevgf "vq'ugzwen'f kuetko kpevkqp. 'ugzwen'j eteuuo gpv. 'ugzwen' euucwnv." qt "xkqrgpeg "eqpvev'y g" Qhhkeg" qh'Vknrg" KZ "Eqornkepeg. "meevgf" ev' [qp" Jem' Tqqo" 649." 3; 2: "Uvef kwo "Tqef." \$774+"495/32; 6. "uknrg/kzB whrligf w

Ugzwcn'Cuucwn'Tgeqxgt{"Ugtxkegu"*UCTU+" Uwf gpv'J gcnj 'Ectg'Egpvgt."5; 4/33830

Wpkxgtukv{ "Rqrkeg"F gr ctvo gpv'cv'5; 4/3333'*qt"; /3/3"hqt"go gti gpekgu+."qt" j wr ⊴ly y y (r qrkeg(whr)gf wi0

Cecf go le'Tguqwtegu

G'ngctpkpi ''gej pkecn'uwr r qtv.'574/5; 4/6579'''ugngev'qr vkqp''4+''qt''g/o ckn''vq''<u>Ngctpkpi/''</u>
uwr r qtvB whngf w0'j wr u<1hrun@v0xhngf wlj gn (hj vo n0

Ect ggt 'Eqppgevkqpu'Egpvgt.'Tgkk| 'Wpkqp.'5; 4/38230'Ect ggt 'cuukuvcpeg'cpf 'eqwpugrkpi =' j wr u<1ect ggt 0xhr0gf vo0

 $Nkdtct \{ \text{"Uwr} \ r \ qtv." \underline{\text{I wr dleo u0whrkd0whr0gf wlcun0}} X ctkqwu'y \ c \{ u'vq'tgegkxg''cuukuvcpeg''y k y "tgur gev'vq''wukpi 'vj g''nkdtctkgu'qt''hkpf kpi 'tguqwtegu0$

Vgcej kpi 'Egpvgt.'Dtqy ctf 'J cm'5; 4/4232'qt'5; 4/86420I gpgtcn'uwf { 'umkmı'cpf 'wwqtkpi 0' j wr u<lycej kpi egpvgt@whr@f wl'0

Y tkkpi "Uwf kq."524"Vki gtv'J cm": 68/335: 0J grr "dtckpuvqto kpi ."hqto cwkpi ."cpf "y tkkpi "r cr gtu0<u>j wr u<liy tkkpi 0whr0gf wly tkkpi /uwf kq.</u>"0

Uwf gpv'Eqo r nckpu'Eco r wu<<u>j</u> wr u<u>llueet(f uq0\thrQf wlr qrkekguluwf gpvj qpqt/eqf g/" uwf gpv'eqpf wev''eqf g |= wr u<u>llectg(f uq0\thrQf wl0</u> Qp/Nkpg''Uwf gpw'Eqo r nckpu<<u>j</u> wr u<u>lf kncpeg0\thrQf wli gwkpi / j grr |=" j wr u<u>lf kncpeg0\thrQf wlincvg/"cwi qtkl cxkqp/ucwull%nwf gpv'eqo r nckpv'0</u></u></u>