C]`Yfg'9X[Y'DUbh\Yfg']b'H\f]``]b['GhUb`Ym 7i d'; Ua Y'%'Cj Yfh]a Y'G\ck Xck b°

 $H\Y^.$ & \$ &) `GhUb`Ym`7 i d`:]bU``ZYUhi fYg`U`fYa UhW\`VYhk YYb h\Y`9Xa cbhcb`C]`Yfg`UbX`: `cf]XU`DUbh\Yfgž`ghUfh]b['\$ bY') "



: `cf]XUž'I G5 !:5g'h\Y'GhUb`Ym'7i d':]bU`g'i bZc`Xž'YI W]hYa Ybh'Z]``g h\Y'U]f']b'Vch\'9Xa cbhcb'UbX': `cf]XU"'H\Y'&\$&) 'a UhW\i d'd]hg'h\Y 9Xa cbhcb'C]`Yfg'U[U]bgh'h\Y': `cf]XU'DUbh\Yfgž'U'\][\`m Ubh]W]dUhYX'fYa UhW\'cZ``Ugh'mYUf g'Z]bU`g"': fYg\'Zfca 'h\Y]f fYgdYWh]j Y'hf]i a d\g']b'h\Y'gYa]Z]bU`gž'Vch\'hYUa g'UfY'YU[Yf'hc YhW\'h\Y]f'bUa Yg']b'\cW_Ym'\]ghcfm'

#D'h\Y'Z]fgh'[Ua Yž'd`UmYX'cb'* bY') ž'&\$&) ž'h\Y'C]`Yfg'YX[YX'ci h
h\Y'DUbh\Yfg']b'U'h\f]``]b['cj Yfh]a Y'Z]b]g\ž'hU_]b['h\Y'j]Whcfm'(!' "
@Ycb'8fU]gU]h`ž'h\Y'_Ym'd`UmYf'Zcf'h\Y'C]`Yfgž'gWcfYX'h\Y'XYW]g]j Y
[cU```UhY']b'h\Y'YI hfU'dYf]cXž'k \]W\'\Ug'VYWca Y'gca Yk\Uh'cZ'U
hfUXYa Uf_'Zcf'h\Y'hU`YbhYX'Zcfk UfX"'K]h\'h\Y'gYf]Yg'bck
i bXYfk Umž'h\Y'C]`Yfg``YUX'%!\$'UbX'UfY'dc]gYX'hc'VUhh`Y'cb'\ca Y

; Ua Y GWX YXi `Y Ub X 6fc UX WUgh

 $\label{eq:conditional} $H\Y'fYa\ U]b]b[\ '[\ Ua\ Y'gWXYXi\ `Y'`cc_g'dfca\]g]b[\ 'Zcf'Vch\'ZUbg'UbX\ d`UmYfg'U`]_Y.$

- ; Ua Y'&.' > bY'+ž'&\$&) ž'&.\$\$'5A
- ; Ua Y''.' > bY'%\$ž'&\$&) ž'&.\$\$'5A
- ; Ua Y'(.'\(\frac{1}{2}\) bY'\(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}2\) \(\
- ; Ua Y').'\(\dagger\) bY'\(\dagger\) \(\dagger\) \(\
- ; Ua Y ** . * b Y *%, ž *& \$ &) ž *& . \$ \$ * 5 A
- ; Ua Y'+.'> bY'&%ž'&\$&) ž'&.\$\$'5A'f||Z'bYWYggUfmŁ

 $\label{thm:condition} : Ubg`WUb`WUhW\`U``h\Y`UWh]cb``]j Y`cb`G_m`Gdcfh`A]I \check{z}`G_m`; c\check{z}`UbX K CK "`<ck Yj Yfž`B<@'hj 'gi VgWf]VYfg`a][\h`ZUWY`U`\]WW dž`Ug`h\Ym UfY`i bUV`Y`hc`k UhW\`h\Y`Z]bU``gYj Yb`[Ua Yg``]j Y`Xi Y`hc`HJ V`UW_ci hg"`H\]g`Z]bU``g\ck Xck b`]g`XfUk]b[`]b`gdcfhg`VYhh]b[UWh]cb`Ug`k Y``ž`k]h\`h\Y`C]`Yfg`W`ffYbh`m`ZUj cfYX`Uh`%"+' `hc`k]b h\Y`7i dž`k \]`Y`h\Y`DUbh\Yfg`UfY`ghUbX]b[`Uh`&"%$`Ug`cZ`$ bY`' ž&$&) "$

Cj Yfh]a Y 8fUa U

H\Y'd`UmcZZg`\Uj Y'Vfci [\hik]h\'h\Ya 'U'g`Yk 'cZ']bhYbgY'cj Yfh]a Y a ca Ybhgž'h\Ub_g']b'dUfh'hc'U'bYk 'cj Yfh]a Y'Zcfa Uh'h\Uh
Y`]a]bUhYg'h\fYY!cb!h\fYY'd`Um'UbX'g\cchci hg'UZhYf'Z]j Y'a]bi hYg cZ'gWcfY`Ygg'UWh]cb"'=Z'hYUa g'fYa U]b'h]YXž'h\Ym'YbhYf'U'gi XXYb!
XYUh\'dYf]cX'h\Uh'`Ughg'&\$ 'a]bi hYg'Zcf'Ug'`cb['Ug']h'hU_Yg'hc
gWcfY'U'[cU'ž'k\YfY'hYUa g'gk Ud'g]XYg'UZhYf'YUW\'dYf]cX"'H\]g
mYUf'U`cbYž'h\Y'd`UmcZZg'\Uj Y'U`fYUXm'gYYb'%, '[Ua Yg'[c']bhc
cj Yfh]a Yž']bWi X]b['h\Y'bU]`!V]h]b['Z]fgh'[Ua Y'cZ'h\Y'Z]bU`gž
fYdcfhYX'I G5'HcXUm"

 $H_UW \ i \ _ 'gWc \ fY \ X' \ k \] \ h' \ 'cb \ 'm' \ \% " + \ 'gY \ Wc \ b \ Xg \ `Y \ Zh' \ hc \ 'gY \ U' \ 'h' \ Y' \ XY \ U' \ '' \ fY' \ c \ Z' \ h' \ Y' \ GhUb \ 'Y \ m' \ 7 \ i \ d$ $: \] \ bU' \ gZ' \ k \ YfY' \ Yf \ Yfm' \ gY \ Wc \ b \ X' \ cb' \ h' \ Y' \ Wc \ W_'] \ gZ' \ ZfUi \ [\ \ h' \ h' \ bg] \ cb''$

<]ghcf]WU`7cbhYlh

5g'h\Y'gYf]Yg'Wcbh]bi Ygž'U```YmYg'k]```VY'cb'8fU]gU]h`ž'k\c'\Ugei]W_`m'YghUV`]g\YX'\]a gY`Z'Ug'U``YUXYf'cb'h\Y']WW'''H\fci[\cihh\Y'&\$&) 'd`UmcZZgž'\Y'\Ug'U`fYUXm'bYhhYX'gYj YfU``Wfi W]U``[cU`g"5`cb['k]h\'\]a ž'7cfYm'DYffm'cZ'h\Y'C]`Yfg'UbX'7UfhYf'JYf\UY[\YcZ'h\Y'DUbh\Yfg'YUW\'`YUX'h\Y'd`UmcZZ'gWYbY'k]h\'Z]jY'cjYfh]a Y[cU`gž'g\ck WUg]b['h\Y]f'dYbW\Ubh'Zcf'XY`]jYf]b['k\Yb']h'a UhhYfg a cgh"

Cbk UfX 'hc'; Ua Y'&' 'k]``h\Y'C]`Yfg'YI hYbX'h\Y]f``YUXž'cf'k]``h\Y DUbh\Yfg'ghf]_Y'VUW_3'Cb`m'h]a Y'k]``hY``ž'Vi h'cbY'h\]b[']g'Zcf gi fY.'h\Y'&\$&) 'GhUb`Ym'7i d':]bU`g'dfca]gY'hc'XY`]j Yf'U``h\Y XfUa U'UbX'YI WhYa Ybh'h\Uh'h\]g'VY`cj YX'qdcfh'WUb'a i ghYf"

cf'a cfY'i dXUhYgž'W\YW_'ci h'K YhhVUg]gž'l G5 'HcXUmž'UbX' 9GDB "

8 YhU]`g	
Cfh	: `cf]XUž'I G5
EiY``Yb	• k k k "k YhhVUg]g"Wca
	• k k k "i gUhc X Um" Wca
	• k k k "Ygdb"Wca

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'a Y]b!k]Yb "bYh