A @7 'G\ck Xck b. 'Hcd 'HYUa g'6Uhh`Y 'Zcf D`Umc ZZ'; `cfm']b '@Ui XYf\]``°

8]gWcj Yf'h\Y``UhYgh'i dXUhYg'Zfca '6fck UfX'7ci bhm'Ug'A U'cf @YU[i Y'7f]W_Yh', \$' - /g'd`UmcZZg'UddfcUW\ž'ZYUhi f]b['_YmauhWXyg'UbX'ghUbX]b[g"



6fck UfX:7ci b hm'GhUX]i a ž'@Ui XYf\]``ž: `cf]XU'!'H\Y
YI W]hYa Ybh']g'fYUW\]b['U'ZYj Yf'd]hW\'Ug'h\Y'&\$&) 'YX]h]cb'cZ'A U'cf
@YU[i Y'7f]W_Yh'fA @7 L'XfUk g'hc'U'WcgYž'k]h\'^1 gh'g]I 'XUmg
fYa U]b]b[']b'h\Y'`YU[i Y'ghU[Y"'5\W\cfX]b['hc'7\Uf]V\Y\Ub
B\Uh]cb\U``K\YY_`m\zh\Y'd`\Umc\Z'd]\Whi\fY']g'\Y\\cappaca a]b['\WY\UfYf\zh\\Uf\m'\UZh\Yf'h\Y'G\Uhn`Y'Cf\W\g'fY\\bh'\Zci f!k]\W_Yh'j]\Whcfm
cj Yf'h\Y'G\Ub': f\Ub\W]g\\cappacilor b]\\chicfbg\zig\\U_]b['i d'h\Y'gh\Ub\X]b[g']b'h\Y\
dfc\W\gg"

5gʻ]hʻghUbXgžʻGUbʻ: fUbW]gWcʻI b]WcfbgʻUfYʻYUX]b[ʻh\YʻdUW_ik]h\ %&ʻdc]bhgʻZfcaʻ, ʻa UhWkYgžʻVcUgh]b[ʻUbʻ]a dfYgg]j YʻbYhʻfi bʻfUhY cZʻŽ %"+&&"ʻ7`cgYʻcbʻh\Y]fʻ\YY`gʻUfYʻh\Y`K Ug\]b[hcbʻ: fYYXca ž k\cʻUfY`U`gcʻh]YXʻcbʻdc]bhgʻVi hʻ\Uj YʻUʻ[Ua Yʻ]bʻ\UbXʻUbXʻUʻg]l!

a UhW\ k]bb]b['ghfYU_'i bXYf'h\Y]f'VY`hg"'H\Y'HYI Ug'Gi dYf'?]b[g g]h'Wca ZcfhUV`m']b'h\]fX'k]h\'Z]j Y'k]bg'ci h'cZ'gYj Yb'a UhW\Yg'Vi h ZUWY'U'f]g_m']bWcbg]ghYbWm'h\Uh'Wci `X'YbXUb[Yf'h\Y]f'dcg]h]cb"

IdWca]b[AUhWXYg

91 W]h]b['WUg\Yg'UfY'cb'h\Y'\cf]ncbž'k\]W\ 'Wci `X'g][b]Z]WUbh`m]bZi YbWY'd`Umc \mathbb{Z} 'XmbUa]Wg"'H\Y'K Ug\]b[hcb': fYYXca 'UfY'gYh'hc ZUWY'h\Y'GYUhh`Y'CfWUgž'k\]`Y'h\Y'HYI Ug'Gi dYf'?]b[g'k]``'VUhh`Y']h ci h'U[U]bgh'h\Y'a][\hm'I b]Wcfbg"'Ch\Yf'_Ym'Z]I hi fYg']bWi XY.

- * `m'' . '@5 '? b][\h'F]XYfg'j g"'A =BYk 'Mcf_ž'UbX'GUb : fUbW]qWc'l b]Wcfbg'j g"'HYl Ug'Gi dYf'?]b[g"
- * `m'(.'K Ug\]b[hcb::fYYXca 'j g"'GYUhh`Y'CfWUgž'UbX'U fYa UhW\'VYhk YYb'A =BYk 'Mcf_'UbX'@5'?b][\h'F]XYfg"
- ximi). "GYUhhiY "CfWUgij g" "HYT Ugi Gi dYfi?]b[gži UbXi:fYYXcaig" BYk "Mcf_"
- * `m'*. 'GUb': fUbW]qWc'| g"'@cg'5b[Y`Yg"

 $H\Y'd`UmcZZg'_]W_'cZZ'cb' \not\Rightarrow `m', `k]h\'EiU`]Z]Yf'\% Zc``ck YX'Vm'h\Y \\ 9`]a]bUhcf'cb' \not\Rightarrow `m'- 'UbX'EiU`]Z]Yf'\&'cb' \not\Rightarrow `m'\%Z'`YUX]b['id'hc'h\Y [fUbX'Z]bU`Y'cb' \not\Rightarrow `m'\%('Uh'; fUbX'DfU]f]Y'GhUX]ia "$

7i ffYbh'GhUbX]b[g'GbUdg\ch

 $\label{eq:hchi} Hc `hfi `m`[fUgd `h\ Y`Wca dYh]h]j Y`gd]f]h`cZ`h\]g``YU[i Yž``Yh g`hU_Y`U ei]W_``cc_`Uh`h\ Y`ghUbX]b[g`^i gh`VYZcfY`h\ Y`a UhW\ Yg`cb`$\`m`&.$

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	?b][\h					
	F]XYfg					
	fl@5?FŁ					

5g'k Y'a cj Y'Zcfk UfX']b'h\]g'h\f]``]b['gYUgcbž'ZUbg'WUb'`cc_Zcfk UfX'hc'a UhW\Yg'h\Uh'k]``bc'Xci Vh'_YYd'Yj YfmcbY'cb'h\YYX[Y'cZ'h\Y]f'gYUhg"'9UW\'[Ua Y'Wci `X'Z']d'h\Y'gWf]dh'Zcf'hYUa g'cgh`]b['Zcf'd`UmcZZ'dcg]h]cb]b['''5`gcž'Ug'fYdcfhYX'Vm'7f]W_YhDUbXUž'a i `h]d`Y'a UhW\Yg'\Uj Y'U`fYUXm'g\UdYX'h\Y'ci h`cc_žg\ck]b['h\Uh'Yj Yfm'dc]bh'Wci bhg'Ug'k Y']bW\'WcgYf'hc'h\Y'd`UmcZZg"

<ca Y'[Ua Yg'Uh'h\Y'6fck UfX'7ci bhm'GhUX]i a ']b'@Ui XYf\]``ž
: `cf]XUž'Vf]b['U'gdYW]U`'Uha cgd\YfY'hc'h\]g'gi a a Yf'`YU[i Y'''+h g'U
[f]dd]b['h]a Y']b'A U'cf'@YU[i Y'7f]W_Yhž'UbX'ZUbg'UfY'YU[Yf'hc'gYY
k\]W\'hYUa g'k]```UXj UbWY'UbX'k\]W\'Ugd]fUh]cbg'k]```ZUXY'Ug'h\Y
XfUa U'i bZc`Xg'cb'h\Y'd]hW\"</pre>

8 Y hU]`g	
Cfh	6fck UfX 7ci bhm GhUX]i a ž@Ui XYf\]``ž: `cf]XU
EiY``Yb	k k k "WUf]VVYUbbUh]cbU`k YY_`m"W
	са
	k k k "h\YWf]W_YhdUbXU"Wca

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