

ARRL / Signal Corps random letter & number code practice groups:

OKICQ AEIOU MVHVD JEHDY ZMNZB  
24680 13579 APLKM MCNCB NDBGY  
CKTOG CJRNO NDHBH PAOKU KDIOE  
AXBTR YOUMK JTIOE MDHNNH CVQAR

03759 CEMID MNLFG UEYTA NASTF  
CWXCK JXEFY YOUMK QYEUR CFGIL  
DKAKX EFMEY VOIUM QWZXX CADXA  
WQYFZ 49285 12709 MNOPA TTLOR

OMIWG JNABD 97201 KQZAX MAIDP  
HSPCQ JBCYD EFXNK LARDO 76321  
XGLDT PGZUN LCKQH MQECV 70365  
80701 CTILL 0CYAA BEXZB OHWIM

RKMOZ THQVI ZLJBI ALCRJ VTNEE  
EKJCD HMOUS 84707 DLZIK HELKF  
DJHNG TVCPT KDKNG PHVTX 47382  
HHHGJ CPTKO FHFUX HIMAD MRFXE

LDOSJ 20184 NTVMG CPNZI 40367  
12310 VNFBH WOHZR JBOAH OBRDK  
BAYQT DIEUY IPAQZ GYEVZ PVFKQ  
QNBAV JCUWH FNZQJ ARJZU RBEPF

25894 83746 PGMAE DXAQN KDIEY  
JXHGQ LKDOP 10273 11902 MDIDH  
98015 WEQFQ DXNZE 06143 09165  
MBUDF 17863 98234 CPTOK QZASU

Common words / fragments for high speed review:

THE ONS ITS THAT WHICH  
ING ESS WHO HAVE THEIR  
AND AVE HIM WITH THERE  
ION PER MAY FROM WOULD

ENT BUT OUT WERE THESE  
HER NOT OUR THEY SHALL  
TER DAY ANT WILL GREAT  
COM INE NOW THIS OTHER

ALL ONE YET WHAT ABOUT  
CON SUB TWO MORE THOSE  
MAN WAS OWN UPON COULD  
EST YOU OLD LIKE FIRST

FOR HIS NEW SUCH MIGHT  
ATE HER CAN INTO AFTER  
ERS SHE ANY TIME TRANS  
NCE HAS TED VERY RADIO

**J random code practice, FO=0**

fphcb rzlfg doukf ksjir uxtwy kqtjl qgoui rjgba llmen pgqir sjnec  
mgofw yxxzo fymrf dmrrc mtwlj djeay zteal xdnbi ephcb pjpto halxb  
xhkqv xtuaic mtbpl fpwju xuipe sjeph czdrh pepdm gqtcn rlvph jksje  
ayzte alxdl nayzv suvnt duipm rgosw lfgdm ealou vfggq gbyzt cmtbp  
lfnip kfosu ipkda ykqvy ksjud osuvj uvean cohjm enswy xcbie pfmrl  
vntdw wlire alqvx rgqqq thohp gbtie alxbx hmenr poshq tjenr gbfpn  
czdt hqtje ntuxb ztean jvxtw wwwlf pwlkd wwlkf kshsh ofdmr pqiru  
xrico uvfqq osjci lqvxt uiecz bfpfo hhftz bfnri rxxzo hksjb vyksj  
bvwym rhpgd jcmgd houir jiruv daykq ticmr lxbxf ymrhr sjlsu ksuvp  
hjmgd oukdw wjuxs wjmgb yksho ukfpy xalme pbyks hqgof dohly mrgqi  
epfoh hhftz bdbbk fphcz bfnri pjptm rgbdz nephl ayxmg qgouv wldsj  
cmgbt ieczd tvxkf nipkf osuir alqgo swlfe pgouv wjryz ymgqi eanen  
rrecb mrfdm rpoux kdzc epwli pouvu xzohk qthxk qgqic bzwlfnipkf  
osuir yxksw yment duiy xkqic osjng qgqgb yzvsu vphjk shqic bbmrf  
dmtdu iryxm gqgos hqtho fbanb gofdm rposj epfoh hftrlv ghjmg douip  
ouxir hsjen tuxbx hksjd hqgof ballm gbtkq gdrfb allme npgqg byxhk  
qvuda aykfo swyzq tcmrn jtjng qieal qvdc oukfi cbqtm rirxv juxuk  
dwwjw jkshq iepfo ftbpj rjipg bvyks jdhqg ofdmt fkqtm ripld zczc  
epyxa lmenn uicbq tohcb rzlds houip tmrgd rhpen piean entfk sjgba  
llouv fggqi pgdho ukfpy xancm tfksh uvuxx alouv fqiec zyxxz qvqip  
jrjir uxrgo swldq tiecz drfba nbien twjth xmgou iczen ipmri cosjl  
qgouk dzczc bshsh ofbal lmgdj cmepb yksc mgdjc menu icbsh shqth

**N random code practice, FO = 0 (also G, sent as single chars)**

lp7s1 hp1vw 3eukf asj8r kxjmy 6slp7 iy6qk xjs3g x3ew5 v268r 4pnqi  
ym07y 49tz0 7ecdx j8t7y ozwl9 tzum0 5facd dddry 4p7s1 11hv4 7cddx  
pn6s1 xj6au 4p11h 5f8bw 3u4rq kf4p7 sl9dd bwl3y mgfu4 9dx5h v2ozu  
m05fa cdddx jm05v igxp9 zm07s 3y6as lvw3y 6s3uk hbq26 s305f u4p11  
h5z07 cbaum 07cv2 q28ry 689tj 6acdb wn6sj 2ohvi gfu2o j8ry4 pr49d  
xp9z2 8r47e wns1x 3ymiw 5zqdb cdbaa cddxp nm0pt rqkzw 5f49j 8t1p7  
sl9t5 zw5f4 9zgdz 5fact 51xjm iyoh5 f8rkz 28rkf as3kz gxj8t r68rk  
x3eeu khbq2 qtfo1 nslxj 6aasl tlprk xxhpl t19jo h9tz0 n689d ry689  
driec ddbct zeect j6qkx j8rkh v2q28 bau49 ddxp7 ecddr 4p7y6 qigx5  
hviw3 eukz2 8bw3e cviwn q2oj6 q05fo js3ew lnq2o jmigx johba s3ymy  
4prkx xxhpl t5hbw lp7s1 t19jo 11hvo j8t51 305hb qkz26 q2q07 slfoz  
eecdb aasl9 tln05 z07cb aum0n 07iy6 as1vg v2q07 slnkf u26qi ew30p  
t7ecb cdxj8 trq0n 0pr4r kf8r4 rq07c tz0n6 sl9zm iymyo hvoh5 z07cb  
aum0n kzmyy ym0p9 zm0nk zmiee u4pn6 q26s3 05vig x5hv2 ojmyo hbcdx  
j89zm 0nkz2 6q2qk zw5zg x3gdr igxj8 trqkf 4prkx xh9ex 5hviw 3eu4r  
q0nkx 3kf49 zgdxp n689t jmigx 3gx3e cdbq2 89dx3 gx3ew 5v26s 30pn6  
slhv2 6acba u2ozg fu49t 5lpn6 qiewn slhvi eukfu 47cvo joh9d bw3uk  
z28bc v2ojm y4prk hp111 xj8bc dry68 9tjmi gxj89 facvo jolhp r4r4r  
kfojs 3ew5f au47c v47s1 hp1fo j6qkh voj89 ddbw5 view3 0p9fa sjs3g  
x3ukh bq268 bctj6 q05fo jsj28 9fas3 07ctj s3ukh bqiec v49tz gv2o1  
lxj8r kx3y6 as1f8 baasl 9dx3g dry49 zw5l9 z26aa u4rkz 07s3e eu4p7  
iy6q0 pr4r4 7s3kz gx3gx 3ectz eewln q2oze ectze ew5fa u47s3 kzw5z

O random code practice, FO = 0

note:       =       dahdididah  
             /       dahdididahdit  
             \*       dididahdah       SK  
             +       didahdididit       AS  
             -       didahdidahdit       AR

?p7k1 \*htno 3/ukf =sj8r cxbey iwh\*j eu2=o hj478 9zas1 fey8r -\*n2=  
=/, .2 od?z, .6,pt .kxza sjwl9 lrmy4 prug\* 5d?jq 4p7k1 ?xdzw 7g\*5\*  
l+iwl xba/q 091?1 5+c+0 nugvu gz4p7 kxtpx ns53= /-rq0 5\*1xh 7y8rm  
y4pru g\*5d9 3y4pv as1t1 biw3c +u26, tno3= =ozec tvqey 474pr q091?  
15.w3 -vmyi w3-r6 my4.y i09ln 2689+ 0j=o3 2oh72 kbymg vsjq4 p305\*  
ltl1bm cbgze -rwlx +u6mg \*vcxn wh7/u g\*5\*1 +mctx vugvg \*z4lf ,p?p7  
kxtt\* vg\*z4 ljs5\* prugd hlxbe u2k15 +cbkb mcbkf =sfgv ct.kx vy8rc  
x+yie ctvqe ugz0i rwlxb a/ukx p?p34 ppl9x p?lf- \*d?z, +i09h .yi09  
h.u6, pxnwl riawl n2=oh j8rct r6my4 7/q05 \*5\*1. 6,pxr -\*jia aas1x  
h72o3 /ukbm c+0nq 472oz my8n2 =s5+g vozas 5zmy8 n6mct .oh.e c+u6q  
4p34p ppl9x p99b8 ?p7kx p?lf- ?xdzs f,p95 vcxh. iw3u6 qeukb ,tj8r  
iawh7 /ukxt tdfs5 .w3-v myiw7 0jeu2 6,tnk feukb ,p7w7 /u6qi e-vct  
xzecb ,pt.k xvukf sln8n ,+cbg vukb8 ?z,+i wh?3q eu6q0 9+k15 .w3-v  
myiw7 w3qie ymct1 biw7w 3qeyi e-\*n6 qey47 4pvas 1xh7y 8n6q0 9b,pt  
.klbi w7w3u 6qeug vg\*vc t78?j mct.k xvugz 4p34p pl5\*1 xh72o 3/ugv  
ukfoh fgz41 js5\*1 +i09l n6mct 789za wh7a/ ,tpt7 89zas 1fey4 74l+i  
wltr6 qe-vm ymgz- rq05d hh\*n6 qie-r wltr= /ukf6 8rozs f-\*d9 +0nuk  
bmc+4 7y8n6 q4p34 l91?x hj8nw h.yi0 9ln6m ct.k1 f=ozs f-?11 n8n8n  
,+gvo zas1b 268ro zw7k1 \*htj8 n2=od zsf,t pxns1 fie-v ct1f= sj478  
9zect vqey8 nwl2 =s5+g vo32k lf=sf kb8?v ozect vqiec +od?z -v/-?  
xhj8r cx+u2 6,tj4 7/ukx tpt78 ?jq41 jwhh? 3u6m2 68n,. w3c+y ie-\*j  
eu2=s 1n8n8 rsfgv ct789 zawlr ias5z my8ri awlri as1b2 68rsf gvg\*v

J random code practice, FO = 1

ohjme nswyx cbiep fmrlv ntdww lirea lqvvr gggqt hohpg btiea lxbxh  
menrp oshqt jenrg bfphc zdtth qtjen tuxbz teanj vxtww wwlfp wlkdw  
wlkfk shsho fdmrv qirux ricou vfggo sjczl qvxtu iecz bfpoh hftzb  
fnrir xxzoh ksjob yksjb vwymr hpgdj cmgdh ouirj iruvd aykqt icmrl  
xbxfy mrhrs jlsuk suvph jmgdo ukdww juxsw jmgby kshou kfpyx almep  
byksh qgofd ohlym rggie pfohh hftzb dbbkf phczb fnrip jptmr gbdzn  
ephla yxmgq gouv w ldsjc mgbti eczdt vxkfn ipkfo suira lqgos wlfep  
gouv w jryzy mggie anenr recbm rfdmr pouxk dzcze pwlip ouvux zohkq  
thxkq gqicb zwlf n ipkfo suiry xkswy mentd uiryx kqico sjngq gqgby  
zvsuv phjks hqicb bmrfd mtdui ryxmg qgosh qthof banbg ofdmr posje  
pfohh frlvp hjmgd ouipo uxirh sjent uxbxh ksldh qgofb allmg btkqg  
drfba llmen pgqgb yxhkq vvd a ykfos wyzqt cmrnj tjngq iealq vvdco  
ukfic bqtmr irxvj uxukd wwjjw kshqi epfof tbpjr jipgb vyksj dhqgo  
fdmtf kqtmr ipldz czcze pyxal mennu icbqt ohcbr zldsh ouipt mrgdr  
hpenp ieane ntfks jgbal louvf qgqip gdhou kfnyx ancmt fkshu vuxxa  
louvf qiecz yxxzq vqipj rjiru xrgos wldqt iecz d rfbn biant wjthx  
mgoui czeni pmric osj lq goukd zczcb shsho fball mgdj c mepby ks jcm  
gdjcm ennui cbshs hqthq tjent wjvxt wyksh pdmgq vqipj rhsje phcbr  
xvjux ukdww juvgo fwyxx zofww jrhsj enrir xxzqt ealvp hjmgd oukfk  
sjipe nnuic zenkf gdmec bgofb allmg bvyme phlaa lsuic ohfrl vnrrc  
ofmrn jtjlq gouip tmtwl jdhou kdbqt ofmtb pjrji pgdho ukdbs hs jcz  
neph l ymtwy kqthx kqiec mtdwy zohkq vvfqi cmrgb dbzwj rhshq tjeph

**N random code practice, FO = 1 (also G, sent as single chars)**

ohvig fu2oj 8ry4p r49dx p9z28 r47ew ns1x3 ymiw5 zgdbc dbaac ddxpn  
m0ptr qkzw5 f49j8 tlp7s l9t5z w5f49 zgdx5 fact5 1xjmi yoh5f 8rkz2  
8rkfa s3kzg xj8tr 68rkx 3eeuk hbq2q kfo1n slxj6 aaslt lprkx xhplt  
l9joh 9tz0n 689dr y689d riecdbctz eectj 6qkxj 8rkhv 2q28b au49d  
dpx7e cddr4 p7y6q igx5h viw3e ukz28 bw3ec viwnq 2oj6q 05foj s3ewl  
nq2oj migxj ohbas 3ymy4 prkxx xhplt 5hbwl p7slt 19jol 1hvoj 8t513  
05hbq kz26q 2q07s 1foze ecdba asl9t ln05z 07cba um0n0 7iy6a s1vgv  
2q07s lnkfu 26gie w30pt 7ecbc dxj8t rq0n0 pr4rk f8r4r q07ct z0n6s  
l9zmi ymyoh voh5z 07cba um0nk zmymy m0p9z m0nkz mieeu 4pn6q 26s30  
5vigx 5hv2o jmyoh bcdxj 89zm0 nkz26 q2qkz w5zgx 3gdri gxj8t rqkf4  
prkxx h9dx5 hviw3 eu4rq 0nkx3 kf49z gdxpn 689tj migx3 gx3ec dbq28  
9dx3g x3ew5 v26s3 0pn6s 1hv26 acbau 2ozgf u49t5 lpn6q iewns 1hvie  
ukfu4 7cvoj oh9db w3ukz 28bcv 2ojmy 4prkh p111x j8bcd ry689 tjmig  
xj89f acvoj olhpr 4r4rk fojs3 ew5fa u47cv 47s1h plfoj 6qkhv oj89d  
dbw5v iew30 p9fas js3gx 3ukhb q268b ctj6q 05foj sm289 fas30 7ctjs  
3ukhb qiecv 49tzg v2o11 xj8rk x3y6a s1f8b aas19 dx3gd ry49z w5l9z  
26aau 4rkz0 7s3ee u4p7i y6q0p r4r47 s3kzg x3gx3 ectze ewlnq 2ozee  
ctzee w5fau 47s3k zw5zw 5f49z w51xj my68t l3ymg v2o11 x3kf4 p7s1h  
9dbw3 ukz28 bwnm0 7y49t z07yo 1x3kf 49joh 9tzgf acdx5 hviw3 eukfa  
sj8bw 5fau4 rkzgv w3y68 rigx3 gx3ec drym0 5hbq0 7y6au kxh9d xpt7y  
4r49t 5lp7i y6qkh vozwl 9tj6q 0p7cv 4r4p1 11xj8 bctj6 q0p7s 3kfo1  
305hb asjmy 6sl9z mieu2 89z2o z0n6s 1hbqi yoj8t 5hvol x3kzw 5f4p7

O random code practice, FO = 1

note:       =       dahdididah  
             /       dahdididahdit  
             \*       dididahdidah       SK  
             +       didahdididit       AS  
             -       didahdidahdit       AR

oh72k bymgv sjq4p 305\*1 t1bmc bgze- rwx+ u6mg\* vcxnw h7/ug \*5\*1+  
mctxv ugv\* z4lf, p?p7k xtt\*v g\*z4l js5\*p rugdh lxbeu 2k15+ cbkbn  
cbkf= sfgvc t.kxv y8rcx +yiec tvqeu gz05r wlxba /ukxp ?p34p pl9xp  
?lf-\* d?z,+ i09h. yi09h .u6,p xnwlr iawl n 2=ohj 8rctr 6my47 /q05\*  
5\*1.6 ,pxr- \*jiaa as1xh 72o3/ ukbmc +0nq4 72ozm y8n2= s5+gv ozas5  
zmy8n 6mct. oh.ec +u6q4 p34pp pl9xp 99b8? p7kxp ?lf-? xdzsf ,p95v  
cxh.i w3u6q eukb, tj8ri awh7/ ukxtt dfs5. w3-vm yiw70 jeu26,tnkf  
eukb, p7w7/ u6qie -vctx zecb, pt.kx vukfs 1n8n, +cbgv ukb8? z,+iw  
h?3qe u6q09 +k15. w3-vm yiw7w 3qiey mct1b iw7w3 qeyie -\*n6q ey474  
pvas1 xh7y8 n6q09 b,pt. klbiw 7w3u6 qeugv g\*vct 78?jm ct.kx vugz4  
p34pp 15\*1x h72o3 /ugvu kfohf gz4lj s5\*1+ i09ln 6mct7 89zaw h7a/,  
tpt78 9zas1 fey47 4l+iw ltr6q e-vmy mgz-r q05dh h\*n6q ie-rw ltr=  
ukf68 rozsf -\*d9+ 0nukb mc+47 y8n6q 4p34l 91?xh j8nwh .yi09 ln6mc  
t.klf =ozsf -?11n 8n8n, +gvoz as1b2 68roz w7k1\* htj8n 2=odz sf,tp  
xns1f ie-vc t1f=s j4789 zectv qem8n wln2= s5+gv o32k1 f=sfk b8?vo  
zectv qiect+ od?z- v/-?x hj8rc x+u26 ,tj47 /ukxt pt78? jq4lj whh?3  
u6m26 8n,.w 3c+yi e-\*je u2=s1 n8n8r sfgvc t789z awlri as5zm y8ria  
wlria slb26 8rsfg vg\*vg \*z4lj whlxb eyi05 53=- v/-?x hfgz4 p7k1\*  
d9+0n ukbmc +0j/, .2od? z,.2k xhfgz 4lf-\* d?z-r ug\*1x h72o3 /ukf=  
sj8ns 1b268 n,.0n o3==s jmct7 89zaw h.ymc xh.i0 jia/q 4p15\* 1txza  
w305d hh\*je u2=od zsjwl 9ln2= slroz w3091 ?xhj8 nwl n2 =slrs fgz05  
vcxh. ecbey iwh?3 qeym2 klbm g z,+iw ltvqi asf,p 99+kx hfgvg \*z4p7



J random code practice, FO = 2

mgbyk shouk fpyxa lmepb ykshq gofdo hlymr gqiep fohhh ftzbd bbkfp  
hczbf nripj ptmrg bdzne phlay xmggg ouvwl dsjcm gbtie czdtv xkfni  
pkfos uiral qgosw lfepg ouvwj ryzym gqiea nenrr ecblr fdmrp ouxkd  
zczep wlipo uvuxz ohkqt hxkqg qicbz wlfni pkfos uiryx kswym entdu  
iryxk qicos jngqg qgbyz vsuvs hjksh qicbb mrfdm tduir yxmgq goshq  
thofb anbgo fdmrp osjep fohhf rlvph jmgdo uipou xirhs jentu xbxhk  
sjdhq gofba llmgb tkqgd rfbal lmenp gggby xhkqv vdaay kfosp yzqtc  
mrnjt jngqi ealqv vdcou kficb qtmri rxvju xukdw wjwjk shqie pfoft  
bpjrr ipgbv yksjd hqgof dmtfk qtmri pldzc zczep yxalm ennui cbqto  
hcbrz ldsho uiptm rgdrh penpi eanen tfksj gball ouvfq gqipg dhok  
fpyxa ncmtf kshuv uxxal ouvfq ieczy xxzqv qipjr jirux rgosp ldqti  
eczdr fbanb ientw jthxm gouic zenip mrico sjlqg oukdz czcbs hshof  
ballm gdjcm epbyk sjcmg djcme nnuic bshsh qthqt jentw jvxtw ykshp  
dmqqv qipjr hsjep hcbrx vjuxu kdwwj uvkof wyxxx ofwwj rhsje nrirx  
xzqte alvph jmgdo ukfks jipen nuicz enkfg dmecb gofea llmgb vymep  
hlaal suico hfrlv nrrco fmrnj tjlgg ouipt mtwlj dhok dbqto fmtbp  
jrjip gdhou kdbsh sjczt ephly mtwyk qthxk qiecm tdwyz ohkqv vfgic  
mrgbd bzwjr hshqt jephc zbfph alxdn zuirh uxkfn kdqti ecbrx vlkdw  
yxcbi cbbmt vvuvj wlaal sukqi pjrjg ballo sjlqi cmepb ymepg ouxkf  
pyzof wwldz enipk fgggg dofux irecz wlfpw lkfks huvux zqtea nljbv  
wymrf byxhk sjbti ecnpj ptohc zbfph alvnt duipk dcmea lmgbv wwwjr  
jirsj necou ipqip gdhqi czlqt jlggq iczls jbtqk ipldz epyzo hkqtj

**N random code practice, FO = 2 (also G, sent as single chars)**

iwnq2 oj6q0 5fojs 3ewln q2ojm igxjo hbas3 ymy4p rkxxx hplt5 hbwlp  
7slt1 9jo11 hvoj8 t5130 5hbqk z26q2 q07s1 fozee cdbaa sl9t1 n05z0  
7cbau m0n07 iy6as 1vgv2 q07s1 nkfu2 6qiew 30pt7 ecbcd xj8tr q0n0p  
r4rkf 8r4rq 07ctz 0n6s1 9zmiy myohv oh5z0 7cbau m0nkz mymym 0p9zm  
0nkzm ieeu4 pn6q2 6s305 vigx5 hv2oj myohb cdxj8 9zm0n kz26q 2qkzw  
5zgx3 gdrig xj8tr qkf4p rkxxh 9dx5h viw3e u4rq0 nkx3k f49zg dxpn6  
89tjm igx3g x3ecd bq289 dx3gx 3ew5v 26s30 pn6s1 hv26a cbau2 ozgfu  
49t5l pn6qi ewns1 hvieu kfu47 cvojo h9dbw 3ukz2 8bcv2 ojmy4 prkhp  
111xj 8bcdr y689t jmigx j89fa cvojo lhpr4 r4rkf ojs3e w5fau 47cv4  
7slhp 1foj6 qkhvo j89dd bw5vi ew30p 9fasj s3gx3 ukhbq 268bc tj6q0  
5fojs j289f as307 ctjs3 ukhbq iecv4 9tzgv 2o11x j8rkx 3y6as 1f8ba  
asl9d x3gdr y49zw 5l9z2 6aau4 rkz07 s3eeu 4p7iy 6q0pr 4r47s 3kzgx  
3gx3e ctzee wlnq2 ozeec tzeew 5fau4 7s3kz w5zw5 f49zw 51xjm y68t1  
3ymgv 2o11x 3kf4p 7slh9 dbw3u kz28b wnm07 y49tz 07yo1 x3kf4 9joh9  
tzgfa cdx5h viw3e ukfas j8bw5 fau4r kzgvw 3y68r iex3g x3ecd rym05  
hbq07 y6auk xh9dx pt7y4 r49t5 lp7iy 6qkhv ozwl9 tj6q0 p7cv4 r4p11  
1xj8b ctj6q 0p7s3 kfo13 05hba sjmy6 sl9zm ieu28 9z2oz 0n6s1 hbqiy  
oj8t5 hv01x 3kzw5 f4p7s lt1p7 cdddd bqkx3 0n05z gf8ba aslh9 drkz2  
oj8ry ohbct 17cdb cbq07 y6q2o 11xjs 3gx3u 4p7ie eewln qigv2 q0n05  
foz07 yohpr kz07c bq26s jo13u 47ecv oh5f8 rkfas 307ct zgfac tl9dr  
iecdx 30pn6 89dba as111 hv47s lt1p7 cdxp9 zm07c viy6s 3ecdr iy01x  
j8r4p nqieu 4r68b ctjmy o1nsl p7iy y01n8 9dbq2 olhpr kfoz0 n6slp

O random code practice, FO = 2

note:       =       dahdididah  
             /       dahdididahdit  
             \*       dididahdah       SK  
             +       didahdididit       AS  
             -       didahdidahdit       AR

2ozmy 8n2=s 5+gvo zas5z my8n6 mct.o h.ec+ u6q4p 34ppp 19xp9 9b8?p  
7kxp? lf-?x dzsf, p95vc xh.iw 3u6qe ukb,t j8ria wh7/u kxttd fs5.w  
3-vmy iw70j eu26, tnkfe ukb,p 7w7/u 6qie- vctxz ecb,p t.kxv ukfs1  
n8n,+ cbgvu kb8?z ,+iwh ?3qeu 6q09+ k15.w 3-vmy iw7w3 qieym ct1bi  
w7w3q eyie- \*n6qe y474p vas1x h7y8n 6q09b ,pt.k lbiw7 w3u6q eugvg  
\*vct7 8?jmc t.kxv ugz4p 34ppl 5\*1xh 72o3/ ugvuk fohfg z4ljs 5\*1+i  
09ln6 mct78 9zawh 7a/,t pt789 zas1f ey474 l+iwl tr6qe -vmym gz-rq  
05dhh \*n6qi e-rwl tr=/u kf68r ozsf- \*d9+0 nukbm c+47y 8n6q4 p3419  
1?xhj 8nwh. yi09l n6mct .klf= ozsf- ?11n8 n8n,+ gvoza slb26 8rozw  
7k1\*h tj8n2 =odzs f,tpx ns1fi e-vct lf=sj 4789z ectvq ey8nw ln2=s  
5+gvo 32klf =sfkb 8?voz ectvq iec+o d?z-v /-?xh j8rcx +u26, tj47/  
ukxtp t78?j q4ljw hh?3u 6m268 n,.w3 c+yie -\*jeu 2=s1n 8n8rs fgvct  
789za wlria s5zmy 8riaw lrias lb268 rsfgv g\*vg\* z4ljw hlxbe yi055  
3=-v /-?xh fgz4p 7k1\*d 9+0nu kbmc+ 0j/,. 2od?z ,.2kx hfgz4 lf-\*d  
?z-ru g\*1xh 72o3/ ukf=s j8ns1 b268n ,.0no 3==sj mcb8 9zawh .ymcx  
h.i0j ia/q4 pl5\*1 txzaw 305dh h\*jeu 2=odz sjwl9 ln2=s 1rozw 3091?  
xhj8n wln2= slrsf gz05v cxh.e cbeyi wh?3q eym2k lbmgz ,+iwl tvqia  
sf,p9 9+kxh fgvq\* z4p7k xp?p7 g\*5d? f=ohf kfs5. 0j47/ uk1\*d 9bkbm  
gvsjq 09b,t db89+ 4.i0j iaa/- ?xhj4 789ze -\*jey ias5z m2kfe ukfs5  
+gz,. 2k11n ,.w3- vqey4 .odnu gzec+ k15+c bkf=s fkb8? z-rug dl9h.  
u6,pt 741+i 09h7/ uk1?x dzw7k xp?p7 g\*1t1 biw3- r===o zawh. u2kxh  
j8r-\* n2=/u gvy8n wln6q 05rwh \*jeu6 q05r0 9h7a/ -?11n ,+gz, +iwh\*

J random code practice, FO = 3

rfdmt duiiry xmgqg oshqt hofba nbgof dmrpo sjepf ohhfr lvphj mgdou  
ipoux irhsj entux bxhks jdhdg ofbal lmgbt kqgdr fball menpg qgbyx  
hkqvv daayk foswy zqtcn rnjtj ngqie alqvv dcouk ficbq tmrir xvjux  
ukdww jwjks hqiep fofbt pjrji pgbvy ksjdj qgofd mtfkq tmrip ldzcz  
czepy xalme nnuic bqtoh cbrzl dshou iptmr gdrhp enpie anent fksjg  
ballo uvfqq qipgd houkf pyxan cmtfk shuvu xxalo uvfqi eczyx xzqvq  
ipjrr iruxr goswl dqtie czdrf banbi entwj thxmg ouicz enipm ricos  
jlqgo ukdzc zcbsh ihofb allmg djcme pbyks jcmgd jcmen nuicb shshq  
thqtj entwj vxtwy kshpd mgqvq ipjrh sjeph cbrxv juxuk dwwju vgofw  
yxxzo fwwjr hsjen rirxx zqtea lvphj mgdou kfksj ipenn uicze nkfgd  
mecbg ofbal lmgbv ymeph laals uicoh frlvn rrcof mrnjt jlqgo uiptm  
twljd houkd bqtof mtbpj rjipg dhouk dbshs jczne phlym twykq thxkq  
iecmt dwyzo hkqvv fqicm rgbdb zwjrh shqtj ephcz bfpha lxdnz uirhu  
xkfnk dqtie cbrxv lkdwy xcbic bbmtv vuvjw laals ukqip jrjgb allos  
jlqic mepby mepgo uxkfp yzofw wldze nipkf qgggd ofxui reezw lfpwl  
kfksh uvuxz qtean ljbvw ymrfb yxhks jbtie cbpjp tohcz bfpha lvntd  
uipkd cmeal mgbvw wwjrj irsjn ecoui pqipg dhqic zlqtj lggqi czlsj  
btkqi pldze pyzoh kqtjn ecmgq tcmrn lhnns wyzof ykdbz yzldq vwykf  
nripj ptoha nlhnn uksjg dofxu ipqgb alnay ztcmt brzlf epico hanjv  
vfqgo uxipv anenr posho hpenp icohc brzlf epicm tuxbz vqiql dbshu  
xkfpw lkfic bqtmt wjvvd aaykf qgouv wjpkf qicmr irxvl kficb sjiru  
vdcmg qtcmr njvfv ouien kfenu kqtof ohftb rxvli posje phczb fntwj

**N random code practice, FO = 3 (also G, sent as single chars)**

dxj89 zm0nk z26q2 qkzw5 zgx3g drigx j8trq kf4pr kxxh9 dx5hv iw3eu  
4rq0n kx3kf 49zgd xpn68 9tjmi gx3gx 3ecdb q289d x3gx3 ew5v2 6s30p  
n6s1h v26ac bau2o zgfu4 9t5lp n6qie wns1h vieuk fu47c vojoh 9dbw3  
ukz28 bcv2o jmy4p rkhp1 1lxj8 bcdry 689tj migxj 89fac vojol hpr4r  
4rkfo js3ew 5fau4 7cv47 slhp1 foj6q khvoj 89ddb w5vie w30p9 fasjs  
3gx3u khbq2 68bct j6q05 fojsj 289fa s307c tjs3u khbqi ecv49 tzgv2  
o1lxj 8rkx3 y6as1 f8baa sl9dx 3gdry 49zw5 l9z26 aau4r kz07s 3eeu4  
p7iy6 q0pr4 r47s3 kzgx3 gx3ec tzeew lnq2o zeect zeew5 fau47 s3kzw  
5zw5f 49zw5 lxjmy 68tl3 ymgv2 o1lx3 kf4p7 slh9d bw3uk z28bw nm07y  
49tz0 7yolx 3kf49 joh9t zgfac dx5hv iw3eu kfasj 8bw5f au4rk zgvw3  
y68ri gx3gx 3ecdr ym05h bq07y 6aukx h9dpx t7y4r 49t5l p7iy6 qkhvo  
zwl9t j6q0p 7cv4r 4p111 xj8bc tj6q0 p7s3k fo130 5hbas jmy6s l9zmi  
eu289 z2oz0 n6s1h bqiyo j8t5h volx3 kzw5f 4p7sl tlp7c ddddb qkx30  
n05zg f8baa slh9d rkz2o j8ryo hbctl 7cdbc bq07y 6q2o1 lxjs3 gx3u4  
p7iee ewlnq igv2q 0n05f oz07y ohprk z07cb q26sj om3u4 7ecvo h5f8r  
kfas3 07ctz gfact l9dri ecdx3 0pn68 9dbaa sl11h v47sl tlp7c dxp9z  
m07cv iy6s3 ecdri yolxj 8r4pn qieu4 r68bc tjmyo lns1p 7iyym o1n89  
dbq2o lhprk foz0n 6slpn qiymg fu49t lt5fu 2oz07 ew5hv 4p1f8 riewl  
9jo11 hv47c tlt5f aasjs jo13u 4r6s3 gxjm0 5fu4p lhp1v gv4y4 7ct51  
hbq2q 0nkhb w30pt rqkzg dbw5v iy47s lhp1v gv4yo zgd5x v2o1h p7s30  
n05f8 rkfu4 7cvoz w51hv 26acb q2q07 sl7cb qiyoj oh9dr kfu47 sj8rk  
hviym gfu49 t51hb aaukz gvgfa acv4r kxhp1 h9dr4 rqkf4 p7slt l9zw5

O random code practice, FO = 3

note:       =       dahdididah  
             /       dahdididahdit  
             \*       dididahdidah       SK  
             +       didahdididit       AS  
             -       didahdidahdit       AR

pt.k1 biw7w 3u6qe ugvq\* vct78 ?jmct .kxvu gz4p3 4pp15 \*1xh7 2o3/u  
gvukf ohfgz 4ljs5 \*1+i0 9ln6m ct789 zawh7 a/,tp t789z as1fe y474l  
+iwlt r6qe- vmyng z-rq0 5dhh\* n6qie -rwlt r=/uk f68ro zsf-\* d9+0n  
ukbmc +47y8 n6q4p 34l9l ?xhj8 nwh.y i09ln 6mct. k1f=o zsf-? 1ln8n  
8n,+g vozas 1b268 rozw7 k1\*ht j8n2= odzsf ,tpxn slfie -vct1 f=sj4  
789ze ctvqe y8nwl n2=s5 +gvo3 2k1f= sfkb8 ?voze ctvqi ec+od ?z-v/  
-?xhj 8rcx+ u26,t j47/u kxtpt 78?jq 4ljwh h?3u6 m268n ,.w3c +yie-  
\*jeu2 =sln8 n8rsf gvct7 89zaw lrias 5zmy8 riawl rias1 b268r sfgvg  
\*vg\*z 4ljwh lxbey i0553 =/-v/ -?xhf gz4p7 k1\*d9 +0nuk bmc+0 j/,.2  
od?z, .2kxh fgz4l f-\*d? z-rug \*1xh7 2o3/u kf=sj 8nslb 268n, .0no3  
==sjm ct789 zawh. ymcxh .i0ji a/q4p 15\*1t xzaw3 05dhh \*jeu2 =odzs  
jwl9l n2=s1 rozw3 09l?x hj8nw ln2=s 1rsfg z05vc xh.ec beyiw h?3qe  
ym2k1 bmgz, +iwlt vqias f,p99 +kxhf gvg\*z 4p7kx p?p7g \*5d?f =ohfk  
fs5.0 j47/u k1\*d9 bkbmg vsjq0 9b,td b89+4 .i0ji aa/-? xhj47 89ze-  
\*jeyi as5zm 2kfeu kfs5+ gz,.2 k1ln, .w3-v qey4. odnug zec+k 15+cb  
kf=sf kb8?z -rugd 19h.u 6,pt7 4l+i0 9h7/u k1?xd zw7kx p?p7g \*1t1b  
iw3-r ===oz awh.u 2kxhj 8r-\*n 2=/ug vy8nw ln6q0 5rwh\* jeu6q 05r09  
h7a/- ?1ln, +gz,+ iwh\*n 2==/- rq05d 151by mgz,. 6899+ ohtj4 .u68?  
lf-?x dzw7g dl51b 2=sj4 .odnu gvy47 893y4 prq09 1\*htn kfias 7gdhl  
tvqeu kfod3 -vctx vugvc xns1f iaw7k 1\*htn kfias js5\*p v/-?1 1rsfk  
fs5+c bkf68 rozsj whltr 6qe-v qeukb ,p3-v qiasf -\*d9b kf68r sj8rc  
tr==/ -rq05 dhltv m26,. 0nkb2 =ozw3 4pl9l \*d9bg vugz4 p7kxp ?ljwh

J random code practice, FO = 4

drhpe npiea nentf ksjgb allou vfqqg ipgdh oukfp yxanc mtfks huvux  
xalou vfgie czyxx zqvqi pjrji ruxrg oswld qtiec zdrfb anbie ntwjt  
hxmgo uicze nipmr icosj lqgou kdzcz cbshs hofba llmgd jcmep byksj  
cmgdj cmenn uicbs hshqt hqtje ntwjv xtwyk shpdm gqvqi pjrhs jephc  
brxvj uxukd wwjuv gofwy xxzof wwjrh sjenr irxxz qteal vphjm gdouk  
fksji pennu iczen kfgdm ecbgo fball mgbvy meph1 aalsu iconf rlvnr  
rcofm rnjtj lqgou iptmt wljdh oukdb qtofm tbpjr jipgd houkd bshsj  
cznep hlymt wykqt hxkqi ecmtd wyzoh kqvfv qicmr gbdbz wjrhs hqtje  
phczb fphal xdnzu irhux kfnkd qtiec brxvl kdwyx cbicb bmtvv uvjwl  
aalsu kqipj rjgba llosj lqicm epbym epgou xkfpv zofww ldzen ipkfq  
gggdo fxuir eczwl fpwlk fkshu vuxzq teanl jbvwy mrfby xhksj btiec  
bpjpt ohczb fphal vntdu ipkdc mealm gbvww wjrji rsjne couip qipgd  
hqicz lqtjl qgqic zlsjb tkqip ldzep yzohk qtjne cmgqt cmrnl hnns  
yzofy kdbzy zldqv wykfn ripjp tohan lhnnu ksjgd ofxui pqgba lnayz  
tcmtb rzlfe picoh anjvv fggou xipva nenrp oshoh penpi cohcb rzlfe  
picmt uxbzv qipld bshux kfpwl kficb qtmtw jvvda aykfq gouvww jpkfq  
icmri rxvkl ficbs jiruv dcmgq tcmrn jvvfo uienk fenuk qtofo hftbr  
xvlip osjep hczbf ntwjt jlswy mgbzv qgbfp fmrnj vvdco swlyk dcosw  
layxm goswy zqtea lxdnb ientw jthza ymgos wwjuv ealou vdcos wlayx  
kqqqi czngb xfwvj pvczw jptoh czdtc hqthq thofd ohlym twwwy xvlip  
qiruv fouks jirux tuiea lvnrr cohcb pjpvk bkfpf mtbpl fnkds jcouv  
dcmec biczl qvvda aymrg osuxz qtecb pjrji penpg ouxir jiruv dayks

**N random code practice, FO = 4 (also G, sent as single chars)**

9ddb 5view 30p9f asjs3 gx3uk hbq26 8bctj 6q05f ojsj2 89fas 307ct  
js3uk hbqie cv49t zgv2o 11xj8 rkx3y 6as1f 8baas 19dx3 gdry4 9zw5l  
9z26a au4rk z07s3 eeu4p 7iy6q Opr4r 47s3k zgx3g x3ect zeewl nq2oz  
eectz eew5f au47s 3kzw5 zw5f4 9zw5l xjmy6 8tl3y mgv2o 11x3k f4p7s  
1h9db w3ukz 28bwn m07y4 9tz07 yolx3 kf49j oh9tz gfacd x5hvi w3euk  
fasj8 bw5fa u4rkz gvw3y 68rig x3gx3 ecdry m05hb q07y6 aukxh 9dxpt  
7y4r4 9t5lp 7iy6q khvoz wl9tj 6q0p7 cv4r4 p111x j8bct j6q0p 7s3kf  
o1305 hbasj my6sl 9zmie u289z 2oi0n 6s1hb qiyoj 8t5hv olx3k zw5f4  
p7slt lp7cd dddbq kx30n 05zgf 8baas 1h9dr kz2oj 8ryoh bct17 cdbcb  
q07y6 q2o11 xjs3g x3u4p 7iee wlnqi gv2q0 n05fo z07yo hprkz 07cbq  
26sjo 13u47 ecvoh 5f8rk fas30 7ctzg factl 9drie cdx30 pn689 dbaas  
111hv 47slt lp7cd xp9zm 07cvi y6s3e cdriy olxj8 r4pnq ieu4r 68bct  
jmyo1 nslp7 iymyo 1n89d bq2o1 hprkf oz0n6 slpnq iymgf u49t1 t5fu2  
oz07e w5hv4 plf8r iewl9 jo11h v47ct lt5fa asjsj ol3u4 r6s3g xjm05  
fu4p1 hp1vg viy47 ct51h bq2q0 nkhw 30ptr qkzgd bw5vi y47s1 hp1vg  
viyoi gdx5v 2olhp 7s30n 05f8r kfu47 cvozw 51hv2 6acbq 2q07s 17cbq  
iyoyo h9drk fu47s j8rkh viymg fu49t 51hba aukzg vgfaa cv4rk xhp1h  
9dr4r qkf4p 7slt1 9zw5l p7ymy mgx5v 28t1p r49t5 1hvie ecbac vieec  
bqkz2 6au2o zgfac ddddr y49zw 5l9fa u26au 28bwn 6s3uk hviee cbqkz  
miymy ol3gx p7yo1 hbcvo 1hv47 sl9t5 zw5zw 5zgxj ohbas jmiy4 9dr4r  
68rkh baaas j8rkx j6aac dxpt7 y47s1 11hbc bwlpr 4p11h 5zgfo zeukh  
viy68 ryoln slhv2 6as3y 6actz gfas1 11xj8 bw5v2 q0nkx j8rkh v2q2o



O random code practice, FO = 4

note:       =       dahdididah  
          /       dahdididahdit  
          \*       dididahdah       SK  
          +       didahdididit       AS  
          -       didahdidahdit       AR

tpxns 1fie- vct1f =sj47 89zec tvqey 8nwln 2=s5+ gvo32 k1f=s fkb8?  
vozec tvqie c+od? z-v/- ?xhj8 rcx+u 26,tj 47/uk xtpt7 8?jq4 ljwhh  
?3u6m 268n, .w3c+ yie-\* jeu2= s1n8n 8rsfg vct78 9zawl rias5 zmy8r  
iawlr ias1b 268rs fgv\* vg\*z4 ljwhl xbeyi 0553= /-v/- ?xhfg z4p7k  
1\*d9+ 0nukb mc+0j /, .2o d?z, . 2kxhf gz4lf -\*d?z -rug\* 1xh72 o3/uk  
f=sj8 ns1b2 68n, . 0no3= =sjmc t789z awl.y mcxh. i0jia /q4pl 5\*1tx  
zaw30 5dhh\* jeu2= odzsj wl9ln 2=s1r ozw30 91?xh j8nw1 n2=s1 rsfgz  
05vcx h.ecb eyiwh ?3qew m2k1b mgz,+ iwltv qiasf ,p99+ kxhfg vg\*z4  
p7kxp ?p7g\* 5d?f= ohfkf s5.0j 47/uk 1\*d9b kbm\* sjq09 b,tdb 89+4.  
i0jia a/-?x hj478 9ze-\* jeyia s5zm2 kfeuk fs5+g z,.2k 1ln,. w3-vq  
ey4.o dnugz ec+k1 5+cbk f=sfk b8?z- rugdl 9h.u6 ,pt74 1+i09 h7/uk  
1?xdz w7kxp ?p7g\* 1t1bi w3-r= ==oza wh.u2 kxhj8 r-\*n2 =/ugv y8nw1  
n6q05 rwh\*j eu6q0 5r09h 7a/-? 1ln,+ gz,+i wh\*n2 ==/-r q05dl 51bym  
gz,.6 899+o htj4. u68?l f-?xd zw7gd l51b2 =sj4. odnug vy478 93y4p  
rq091 \*htnk fiaw7 gdhlt vqeu\* fod3- vctxv ugvcx ns1fi aw7k1 \*htnk  
fiasj s5\*pv /-?11 rsfkf s5+cb kf68r ozsjw hltr6 qe-vq eukb, p3-vq  
iasf- \*d9bk f68rs j8rct r==/- rq05d hltvm 26,.0 nkb2= ozw34 pl91\*  
d9bgv ugz4p 7kxp? ljwhh \*jiey mg\*pv /,p?p 305dh ltr=/ q4.e- r=/q4  
.iw3u 6mymg z-rug \*5d?j q4ljw hh?7a /u6my mc+0j =ozec tr=/q 4.iw3  
qeu6q 05vg\* 1.2kx d3c+k xdzw7 kxtt\* vg\*vg \*vct. oh.ec beu2o d9bgv  
y8rct vm2=s j8rcx ba/ug \*1txz aw7k1 ?xd3c b8?p3 091?1 5.0j8 riect

J random code practice, FO = 5

rxxzq tealv phjmg doukf ksjiip ennui czenk fgdme cbgof ballm gbvym  
ephla alsui cohfr lvnrr cofmr njtjl qgoui ptmtw ljdho ukdbq tofmt  
bpjrr ipgdh oukdb shsjc zneph lymtw ykqth xkqie cmtdw yzohk qvfvq  
icmrq bdbzw jrshh qtjep hczbf phalx dnzui rhuxk fnkdq tiecb rxvlk  
dwyxc bicbb mtvuu vjwla alsuk qipjr jgbal losjl qicme pbyme pgoux  
kfpuz ofwwl dzeni pkfqq qgdof xuire czwlf pwlkf kshuv uxzqt eanlj  
bvwym rfbyx hksjb tiecb pjpto hczbf phalv ntdui pkdcm ealmg bvwww  
jrjir sjnec ouipq ipgdh qiczl qtmlq ggicz lsjbt kqipl dzepy zohkq  
tjnec mgqtc mrnlh nnswy zofyk dbzyz ldqvw ykfmr ipjpt ohanl hnnuk  
sjgdo fxuip qgbal nayzt cmtbr zlfep icoha njvfv qgoux ipvan enrpo  
shohp enpic ohcbr zlfep icmtu xbzvq ipldb shuxk fpwlk ficbq tmtwj  
vvdad ykfqq ouvwj pkfqi cmrir xvlkf icbsj iruvd cmgqt cmrnj vvfou  
ienkf enukq tofoh ftbrx vlipo sjeph czbfn twjtj lswym gbzvq gbfpf  
mrnjv vdcos wlykd coswl ayxmg oswyz qteal xdnbi entwj thzay mgosw  
wjuve alouv dcosw layxk qgqic zngbx fwwjp vczwj ptohc zdtth qthqt  
hofdm hlymt wwyyx vlipq iruvf ouksj iruxt uieal vnrrc ohcbp jpvcb  
kfpfm tbplf nkdsj couvd cmecb iczfq vvdad ymrgo suxzq tecbp jrjip  
enpgo uxirj iruvd ayksh qienr ipjpt mtwlj djeay ztcoh ftbrz lfgby  
kqtkq gbfpf mtzbf phalv nrrea lqvvd aymgd mgqvs wjvvd aaayz aayks  
uicof tbrzl fensu kdshq iephc zdrhr uvfqi cmtuv ntdui ryxme cosuv  
ecbgq thqtj entux bxfwy zjran eayme pieal shpdo ukfic zczen kfgdm  
gqvqi rzjra lqicm gbtkq irxvj uvgqt cmrlx bzvqi plfpy xczui pvcbk

**N random code practice, FO = 5 (also G, sent as single chars)**

h9tzg facdx 5hviw 3eukf asj8b w5fau 4rkzg vw3y6 8rigx 3gx3e cdrym  
05hbq 07y6a ukxh9 dxpt7 y4r49 t5lp7 iy6qk hvozv 19tj6 q0p7c v4r4p  
111xj 8bctj 6q0p7 s3kfo 1305h basjm y6sl9 zmieu 289z2 oz0n6 slhbq  
iyoj8 t5hvo 1x3kz w5f4p 7sltl p7cdd ddbqk x30n0 5zgf8 baas1 h9drk  
z2oj8 ryohb ct17c dbcbq 07y6q 2o11x js3gx 3u4p7 ieeew lnqig v2q0n  
05foz 07yoh prkz0 7cbq2 6sjol 3u47e cvoh5 f8rkf as307 ctzgf act19  
driec dx30p n689d baas1 11hv4 7sltl p7cdx p9zm0 7cvii 6s3ec driyo  
1xj8r 4pnqi eu4r6 8bctj myoln sln7i ymyol n89db q2o1h prkfo z0n6s  
lpnqi ymgfu 49tlt 5fu2o z07ew 5hv4p 1f8ri ewl9j o11hv 47ctl t5faa  
sjsjo 13u4r 6s3gx jm05f u4p1h p1vgv iy47c t51hb q2q0n khbw3 0ptrq  
kzgdw w5vii 47slh p1vgv iyozg dx5v2 o1hp7 s30n0 5f8rk fu47c vozv5  
1hv26 acbq2 q07sl 7cbqi yojoh 9drkf u47sj 8rkhv iymgf u49t5 1hbaa  
ukzgv gfaac v4rkx hp1h9 dr4rq kf4p7 sltl9 zw5lp 7ymym gx5v2 8tlpr  
49t51 hviee cbacv ieech qkz26 au2oz gfacd dddry 49zw5 19fau 26au2  
8bwn6 s3ukh vieec bqkzm iymyo 13gxp 7yo1h bcvo1 hv47s 19t5z w5zw5  
zgxjm hbasj miy49 dr4r6 8rkhb aaasj 8rkxj 6aacd xpt7y 47s11 1hbc  
wlpr4 p11h5 zgfoz eukhv iy68r yo1ns 1hv26 as3y6 actzg fas11 1xj8b  
w5v2q 0nkxj 8rkhv 2q2oj my49j o11hv ozwl9 tzum0 5fukx hp1hp 1vwnq  
28bq2 8tlpr 4pltl p7cdx pt7ew ns1hv 2qiw3 ymgvi w51hv 26qkf aaumy  
6aukh plhp1 vgfum gfojm y4p7s 19ddr khbqi yozgx p9zm0 nkz2q ieeew  
68riw 5zw5f 49zgd xp7y4 pln0n q2qig viewn 8tl3e ukfu4 r4rkz gvw3y  
mgv2o hpln0 7iee cdbq2 oh9db wnmgf u49dd x5v2o 1h5fo j8bqk hbcbw

O random code practice, FO = 5

note:       =     dahdididah  
          /     dahdididahdit  
          \*     didididahdidah     SK  
          +     didahdididit       AS  
          -     didahdidahdit       AR

\*d?z- rug\*1 xh72o 3/ukf =sj8n s1b26 8n,.0 no3== sjmct 789za wh.ym  
cxh.i 0jia/ q4pl5 \*1txz aw305 dhh\*j eu2=o dzsju 19ln2 =s1ro zw309  
1?xhj 8nwl n 2=s1r sfgz0 5vcxh .ecbe yiwh? 3qeym 2klbm gz,+i wltvq  
iasf, p99+k xhfgv g\*z4p 7kxp? p7g\*5 d?f=o hfkfs 5.0j4 7/uk1 \*d9bk  
bmgvs jq09b ,tdb8 9+4.i 0jiaa /-?xh j4789 ze-\*j eyias 5zm2k feukf  
s5+gz ,.2k1 ln,.w 3-vqe y4.od nugze c+k15 +cbkf =sfkb 8?z-r ugd19  
h.u6, pt741 +i09h 7/uk1 ?xdzw 7kxp? p7g\*1 tlbiw 3-r== =ozaw h.u2k  
xhj8r -\*n2= /ugvy 8nwl n 6q05r wh\*me u6q05 r09h7 a/-?1 ln,+g z,+iw  
h\*n2= =/-rq 05dl5 1bymg z,.68 99+oh tj4.u 68?lf -?xdz w7gd1 51b2=  
sj4.o dnugv y4789 3y4pr q091\* htnkf iaw7g dhltv qeukf od3-v ctxvu  
gvcxn slfia w7k1\* htnkf iasjs 5\*pv/ -?11r sfkfs 5+cbk f68ro zsjwh  
ltr6q e-vqe ukb,p 3-vqi asf-\* d9bkf 68rsj 8rctr ==/-r q05dh ltv m2  
6,.0n kb2=o zw34p 191\*d 9bgvu gz4p7 kxp?1 jwhh\* jieym g\*pv/ ,p?p3  
05dh1 tr=/q 4.e-r =/q4. iw3u6 mymgz -rug\* 5d?jq 4ljwh h?7a/ u6mym  
c+0j= ozect r=/q4 .iw3q eu6q0 5vg\*1 .2kxd 3c+kx dzw7k xtt\*v g\*vg\*  
vct.o h.ecb eu2od 9bgvy 8rctv m2=sj 8rcxb a/ug\* 1txza w7k1? xd3cb  
8?p30 91?15 .0j8r iectr ===sj q05rw ltr6q ec+u2 68?z- ruk1? xhj8n  
slfeu kfohj 8rctr 6my8n 6q4lf -?xdz sjwl9 lrmy4 prq4p 191\*h tnozm  
y47a/ ,p?p3 09xp? p7g\*1 txze- rwltr 6m2o3 =/-va whltr 6qiw7 aa/qi  
a/q41 91\*ht nkbyi 0j8n6 q4p7k xtpxr ctvqi asjs1 tlbiw 7w3u2 =/q0j  
=sjmg \*vg\*z 4ljs5 \*1.2o hp70n 26m2k fie-r 0553/ ukf68 n8n,. 0no3=  
/-v/- \*hp70 jeyia wh7a/ -\*d9+ 0j/-r q05\*5 \*pv/- ?15+g vsf=o d3cb8

J random code practice, FO = 6

osj1q icmep bymep gouxk fpyzo fwwld zenip kfqqq gdofx uirec zwlfp  
wlkfk shuvu xzqte anljb vwymr fbyxh ksibt iecbp jptoh czbfp halvn  
tduip kdcme almgb vwwwj rjirs jneco uipqi pgdhq icz1q tj1qg qicz1  
sjbtk qipld zepyz ohkqt jnecm gqtcn rnlhn nswyz ofykd bzyzl dqvwy  
kfnri pjpto hanlh nnuks jgdof xuihq gbaln ayztc mtbrz lfepi cohan  
jv1fq gouxi pvane nrpos hohpe npico hcbrz lfepi cmtux bzvqi pldb1  
huxkf pwlkf icbqt mtw1v vdaay kfqqo uvw1p kfqic mrirx vlkfi cbsji  
ruvdc mgqtc mrnjv vfoui enkfe nuaqt ofohf tbrxv lipos jephc zbfnt  
wjtj1 swymg bzvqg bfpfm rnjv1 dcosw lykdc oswla yxngo swyzq tealx  
dnbie ntwjt hzaym gosww juvea louvd cosw1 ayxkq gqicz ngbxf ww1pv  
czw1p tohcz dtthq thqth ofdoh lyntw wwyxv lipqi ruvfo uksji ruxtu  
iealv nrrco hcbpj pvcbk fpfmt bplfn kdsjc ouvdc mecbi czlqv vdaay  
mrgos uxzqt ecbpj rjipe npgou xirji ruvda ykshq ienri pjptm tw1jd  
jeayz tcohf tbrz1 fgbyk qtkqg bfpfm tzbfp halvn rreal qv1da ymgdm  
gqvsw jv1da aayza ayksu icoft brz1f ensuk dshqi ephcz drhru v1qic  
mtuve tduir yxmec osuve cbgqt hqtje ntuxb xfwyz jrane aymep ieals  
hpdou kficz czenk fgdmg qvqir zjral qicmg btkqi rxvju vgqtc mrlxb  
zvqip l1pyx czuip vcbkf pfohf tzbdz nepfv gqtco hftzd tvvwj pkfou  
iep1j wlaan eaaym rgouk dzenk dqtkq ipjrh uvuxx ancmt ficzc zepyx  
ancmt dwyzo fww1p tohal xdnbi czlqt j1sui ecb1x vlkfk shsje phczd  
tvvux zohks j1jco shzay kswyk qv1dc osw1m enuks jgbyx hmenr pqipg  
dhosw l1gba ayzym ecosw jkqvw ykfnt w1jbv wykdz lqv1f ouicb qvczy

**N random code practice, FO = 6 (also G, sent as single chars)**

u4p7i eeewl nqigv 2q0n0 5foz0 7yohp rkz07 cbq26 sjo13 u47ec voh5f  
8rkfa s307c tzgfa ct19d riedc x30pn 689db aas11 lhv47 slt1p 7cdxp  
9zm07 cviy6 s3ecd riyol xj8r4 pnqie u4r68 bctjm yolns lp7iy myoln  
89dbq 2olhp rkfoz 0n6sl pnqiy mgfu4 9tlt5 fu2oz 07ew5 hv4p1 f8rie  
wl9jo 1lhv4 7ctlt 5faas jsjo1 3u4r6 s3gxj m05fu 4p1hp 1vgvi y47ct  
51hbq 2q0nk hbw30 ptrqk zgdbw 5viy4 7slhp 1vgvi yozgd x5v2o 1hp7s  
30n05 f8rkf u47cv ozw51 hv26a cbq2q 07sl7 cbqiy ojoh9 drkfu 47sj8  
rkhvi ymgfu 49t51 hbaau kzgvg faacv 4rkxh plh9d r4rqk f4p7s lt19z  
w5lp7 ymyng x5v28 tlpr4 9t51h vieec bacvi eecbq kz26a u2ozg facdd  
ddry4 9zw5l 9fau2 6au28 bwn6s 3ukhv ieeeb qkzmi ymyol 3gxp7 yolhb  
cvolh v47sl 9t5zw 5zw5z gxjoh basjm iy49d r4r68 rkhba aasj8 rxxj6  
aacdx pt7y4 7s111 hbcbw lpr4p 1lh5z gfoze ukhvi y68ry olns1 hv26a  
s3y6a ctzgf as111 xj8bw 5v2q0 nkxj8 rkxv2 q2ojm y49jo 1lhvo zw19t  
zum05 fukxh plhp1 vwnq2 8bq28 tlpr4 plt1p 7cdxp t7ewn slhv2 qiw3y  
mgviw 5lhv2 6qkfa aumy6 aukhp lhp1v gfumg fojmy 4p7sl 9ddrk hbqiy  
ozgxn 9zm0n kz2qi eewn6 8riw5 zw5f4 9zgdz p7y4p ln0nq 2qigv iewn8  
tl3eu kfu4r 4rkzg vw3ym gv2oh pln07 ieeec dbq2o h9dbw nmgfu 49ddx  
5v2o1 h5foj 8bqkh bcbwl prkxh plt51 3051n mgfuk xhpl9 tl7sl 7cbaa  
ukf8b cbq0n q26as 3y6q0 prkzg f8bq2 o1lx3 07ctj sj289 fu4r4 rkfoj  
sj289 z2oz0 7yolh v47cd dddry olns1 p7y6a aslh9 drkfa s3kf4 p7sl9  
tl7ct z0n68 9tzeu 49fau mymy6 slhvi eecvi gfaas js30p nm0pt r68bc  
tj6as 1vwn6 qkfu2 qiieec v28ri ewl9z wl9dr iew51 ns1hb aau47 cbcv4

O random code practice, FO = 6

note:       =       dahdididah  
          /       dahdididahdit  
          \*       dididahdidah       SK  
          +       didahdididit       AS  
          -       didahdidahdit       AR

e-\*je yias5 zm2kf eukfs 5+gz, .2k11 n,.w3 -vqey 4.odn ugzec +k15+  
cbkf= sfkb8 ?z-ru gdl9h .u6,p t74l+ i09h7 /uk1? xdzw7 kxp?p 7g\*1t  
1biw3 -r=== ozawh .u2kx hj8r- \*n2=/ ugvy8 nwl6n q05rw h\*jjeu 6q05r  
09h7a /-?11 n,+gz ,+iwh \*n2== /-rq0 5dl51 bymgz ,.689 9+oht j4.u6  
8?lf- ?xdzw 7gd15 1b2=s j4.od nugvy 47893 y4prq 091\*h tnkfi aw7gd  
hltvq eukfo d3-vc txvug vcxns lfiaw 7k1\*h tnkfi asjs5 \*pv/- ?11rs  
fkfs5 +cbkf 68roz sjwhl tr6qe -vqeu kb,p3 -vqia sf-\*d 9b6kf6 8rsj8  
rctr= =/-rq 05dhl tv2m6 ,.0nk b2=mz w34pl 91\*d9 bgvug z4p7k xp?lj  
whh\*j ieymg \*pv/, p?p30 5dhlt r=/q4 .e-r= /q4.i w3u6m ymgz- rug\*5  
d?jq4 ljwhh ?7a/u 6mymc +0j=o zectr =/q4. iw3qe u6q05 vg\*1. 2kxd3  
c+kxd zw7kx tt\*vg \*vg\*v ct.oh .ecbe u2od9 bgvy8 rctvm 2=sj8 rcxba  
/ug\*1 txzaw 7k1?x d3cb8 ?p309 1?15. 0j8ri ectr= ==sjq 05rwl tr6qe  
c+u26 8?z-r uk1?x hj8ns 1feuk fohj8 rctr6 my8n6 q4lf- ?xdzs jw19l  
rmy4p rq4pl 91\*ht nozmy 47a/, p?p30 9xp?p 7g\*1t xze-r wltr6 m2o3=  
/-vaw hltr6 qi7a a/qia /q4l9 1\*htn kbyi0 j8n6q 4p7kx tpxrc tvqia  
sjs1t 1biw7 w3u2= /q0j= sjmg\* vg\*z4 ljs5\* 1.2oh p70n2 6m2kf ie-r0  
553/u kf68n 8n,.0 no3=/ -v/-\* hp70j eyiaw h7a/- \*d9+0 j/-rq 05\*5\*  
pv/-? 15+gv sf=od 3cb8? p34pl 9xp95 vcxdj /-rq4 pl9xt tdb,p 3-vm2  
6,+c+ 4.i0n 26qec +u2=s 1n,.0 j47a/ -?xhf kb8?v o32k1 f68n8 n,+gv  
o32k1 bmgz, .2kxd zw7g\* 5d?jq 05rwh \*jia/ uk1\*d 9b6kf= sfgz4 p7kxt  
tdb8? z,+i0 9lrie -?7a/ qi7a wltr= /q472 kb2=s j4741 +mctx vy8nw  
ln26, tnozq iw7/u 2=/q4 7y4.u 68?lj wl9h. u6895 rwltv m268r o3c+

J random code practice, FO = 7

yztcm tbrzl fepic ohanj vvfqg ouxip vanen rposh ohpen picoh cbrzl  
fepic mtuxb zvqip ldbsh uxkfp wlkfi cbqtm twjvv daayk fggou vwjpk  
fqicm rirxv lkfic bsjir uvdcn gqtcn rnjvv fouie nkfen ukqto fohft  
brxvl iposj ephcz bfntw jtjls wymgb zvqgb fpfmr njvvd coswl ykdco  
swlay xmgos wyzqt ealxd nbien twjth zaymg oswwj uveal ouvdc oswla  
yxkqg qiczn gbxfw wjpvc zwjpt ohczd tthqt hqtho fdohl ymtww wyxvl  
ipqir uvfou ksdir uxtui ealvn rrcnh cbpjp vcbkf pfmtb plfnk dsjco  
uvdcn ecbic zlqvv daaym rgosu xztte cbpjr jipen pgoux irjir uvday  
kshqi enrjp jptmt wljdd eayzt cohft brzlf gbykq tkqgb fpfmt zbfph  
alvnr realq vvdav mgdmg qvswj vvdav ayzaa yksui coftb rzlfe nsukd  
shqie phczd rhruv fqicm tuvnt duiry xmeco suvec bgqth qtjen tuxbx  
fwyzj ranea ymepi ealsh pdouk ficzc zenkf gdmgq vqirz jralq icmgb  
tkqir xvjuv gqtcn rlxbz vqipl fpyxc zuipv cbkfp fohft zbdzn epfvg  
qtcoh ftzdt vvwjp kfoui epwju laane aaymr goukd zenkd qtkqi pjrhu  
vuxxa ncmtf iczcz epyxa ncmtd wyzof wwjpt ohalx dnbic zlqtj lsuie  
cbrxa lkfks hsjep hczdt vvuxz ohksj djcos hzayk swykq vvdco swjme  
nuksj gbyxh menrp qipgd hoswl fgbaa yzyme coswj kqvwy kfntw ljbvw  
ykdzl qvvfo uicbq vczyn jpmri cmepb ykqvw ymttj epfmt zbfpf mtbpl  
dzcbq vczyn ldqvw wyzjp mrgou kdbqt mrgdr fbanz swldq vwxyz ldsho  
suxzq tecbp lfnip kfqic mripj rjipe pdmgo hmgbx hkqtj ngqqq gdmtd  
wwjuv gqvsu vntfi epwli pggdm rrecz yzldq tksux bztcn tbrxx xalmg  
dhqic zlqvx rgqqq vvuxx almen nuksh shqtj czlsj bvykq thzay kswww



**N random code practice, FO = 7 (also G, sent as single chars)**

05fu4 plhp1 vgviy 47ct5 lhbq2 q0nkh bw30p trqkz gdbw5 viy47 slhp1  
vgviy ozgdx 5v2o1 hp7s3 0n05f 8rkfu 47cvo zw51h v26ac bq2q0 7sl7c  
bqiyo joh9d rkfu4 7sj8r khviy mgfu4 9t51h baauk zgvvf aacv4 rkxhp  
lh9dr 4rqkf 4p7sl tl9zw 5lp7y mymgx 5v28t lpr49 t51hv ieeeb acvie  
ecbqk z26au 2ozgf acddd dry49 zw519 fau26 au28b wn6s3 ukhvi eecbq  
kzmiy myo13 gxp7y olhbc volhv 47sl9 t5zw5 zw5zg xjohb asjmi y49dr  
4r68r khbaa asj8r kxj6a acdyp t7y47 s111h bcbwl pr4p1 lh5zg fozeu  
khviy 68ryo lns1h v26as 3y6ac tznfa s111x j8bw5 v2q0n kxj8r khv2q  
2ojmy 49jo1 lhvoz wl9tz um05f ukxhp 1hp1v wnq28 bq28t lpr4p ltlp7  
cdxpt 7ewns 1hv2q iw3ym gviw5 1hv26 qkfaa umy6a ukhpl hplvg fumgf  
ojmy4 p7sl9 ddrkh bqiyo zgxp9 zm0nk z2qie ewn68 riw5z w5f49 zgdxp  
7y4pl n0nq2 qigvi ewn8t l3euk fu4r4 rkzgv w3ymg v2ohp ln07i eeecd  
bq2oh 9dbwn mgfu4 9ddx5 v2o1h 5foj8 bqkhh cbwlp rkxhp lt513 051nm  
gfukx hpl9t l7sl7 cbaau kf8bc bq0nq 26as3 y6q0p rkzgf 8bq2o 11x30  
7ctjs j289f u4r4r kfojs j289z 2oz07 yo1hv 47cdd ddryo lns1p 7y6aa  
slh9i rkfas 3kf4p 7sl9t l7ctz 0n689 tzeu4 9faum ymy6s lhvie ecvig  
faasj s30pn m0ptr 68bct j6as1 vwn6q kfu2q ieeev 28rie wl9zw l9dri  
ew51n slhba au47c bcv4p l7s3e eewln q28ri ect5f 4pr4p ltlpr 4p11h  
pr47c bcv4p 1f8ri y4pl7 s3y6q 0p7cv oj89d x3gdb as1f8 riy4p 1foj6  
actzg fas11 h5z07 cbqiy ojo11 xj8bw l3ym0 nmgxp n6slp n6q26 sj89z  
28bwn mgvig xp9fu kf8r4 r6sj8 t7ecv 4p1f8 bqigd x5fu4 plh9t js3ec  
tjmyo lns1x 3ymiw l7ctj s3ew5 faas3 kzw5f oln89 dry6s l9fau mymiy

O random code practice, FO = 7

note:       =       dahdididah  
          /       dahdididahdit  
          \*       dididahdah       SK  
          +       didahdididit       AS  
          -       didahdidahdit       AR

4prq0 91\*ht nkfia w7gdh ltvqe ukfod 3-vct xvugv cxns1 fiaw7 k1\*ht  
nkfia sjs5\* pv/-? 1lrsf kfs5+ cbkf6 8rozs jwhlt r6qe- vqeuk b,p3-  
vqias f-\*d9 bkf68 rsj8r ctr== /-rq0 5dhlt vm26, .0nkb 2=ozw 34p19  
1\*d9b gvugz 4p7kx p?ljw hh\*ji eymg\* pv/,p ?p305 dhltr =/q4. e-r=/  
q4.iw 3u6my mgz-r ug\*5d ?jq4l jwhh? 7a/u6 mymc+ 0j=oz ectr= /q4.i  
w3qeu 6q05v g\*1.2 kxd3c +kxdz w7kxt t\*vg\* vg\*vc t.oh. ecbeu 2od9b  
gvy8r ctvm2 =sj8r cxba/ ug\*1t xzaw7 k1?xd 3cb8? p3091 ?15.0 j8rie  
ctr== =sjq0 5rwltr r6qec +u268 ?z-eu k1?xh j8ns1 feukf ohj8r ctr6m  
y8n6q 4lf-? xdzsx wl9lr my4pr q4p19 1\*htn ozmy4 7a/,p ?p309 xp?p7  
g\*1tx ze-rw ltr6m 2o3=/ -vawh ltr6q iw7aa /qia/ q4l91 \*htnk byi0j  
8n6q4 p7kxt pxrct vqias js1t1 biw7w 3u2=/ q0j=s jmg\*v g\*z41 js5\*1  
.2ohp 70n26 m2kfi e-r05 53/uk f68n8 n,.0n o3=- v/\*h p70je yiawh  
7a/\* d9+0j /-rq0 5\*5\*p v/-?1 5+gvs f=od3 cb8?p 34p19 xp95v cxdj/  
-rq4p 19xtt db,p3 -vm26 ,+c+4 .i0n2 6qec+ u2=s1 n,.0j 47a/- ?xhfk  
b8?vo 32klf 68n8n ,+gvo 32klb mgz,. 2kxdz w7g\*5 d?jq0 5rwh\* jia/u  
k1\*d9 bkf=s fgz4p 7kxtt db8?z ,+i09 lrie- ?7a/q ieyiw ltr=/ q472k  
b2=sj 474l+ mctxv y8nwl n26,t nozqi w7/u2 =/q47 y4.u6 8?ljw 19h.u  
6895r wltvm 268ro 3c+oh p3c+y ias5z my4.u 6,t\*z 4p309 xp?p3 091?1  
ln8ro 3c+oh tj4.u 2ohp3 c+u2= slroz sf,tp t78?f 6,tj4 .u2oh tj8n2  
68?z- ruk1? 15.w3 -vqia sf-?x hj8ns 53=/, +mg\*1 +iwh\* n6qey 4.k1b  
mc+0j /-vas 1t1f6 ,+cbg vy4.k xzec+ ohtj4 7aas5 \*prq0 91\*d? vozaw  
ln6q0 5rwlx +u6mg db8?v ozas1 b2=sf gvg\*z 05r09 h.yiw h?7a/ qieu2