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Project 1 : SDES, Triple DES, Brute Forcing DES

For this project, we turned in the following:

1. SDES . java
2. TripleDES . java
3. CrackingEncryption . java
4. Project1 . java
5. Project1 . jar
6. Project1 . pdf

The first three java files, are our source code for this project, where we answered each question in assignment. Then on #4, you will notice that we included a jar file. This is simply to simplify the process for running our program during our demonstration. This will make it so that we do not have to compile each class and so forth.

Running The Program :

1. To run our program, you will need to first open the command prompt, by searching for "cmd" in the windows start menu.
2. Then, type "java -version" . This will show you if you have Java installed, since it is required for our project.
3. After that, you need to download our jar file from CSNS (this is where it saves time since you don't have to compile each class and so on). Then go back to the command prompt.
4. This time type "java -jar Project1.jar" into the command prompt. You will see our program run.

5. Since the first two questions are based on the examples provided on CSNS, they simply run on their own, you will see Question 1 and Question 2 run on their own.
6. Now you will be prompted with Question 3, which gives you instructions and commands that you can follow. A brief summary of what Question 3 does: It will ask you whether you want to use your own files or the ones that are saved in the program, by using the commands you can chose what action you want to perform. It also asks you how you would like the output of that command to be, from “all” (every line) to “none” (no lines), and even just the answer by using “ans”.
7. After you have input the commands and outputs you desire, the will execute.

Answers and screenshots are provided on the next page.

Screenshots and Answers :

```
run:

 = = = = = =  Question 1  = = = = = = = = =

Raw Key         Plaintext       Ciphertext      DecipheredText
00000 00000     1010 1010       0001 0001       1010 1010
11100 01110     1010 1010       1100 1010       1010 1010
11100 01110     0101 0101       0111 0000       0101 0101
11111 11111     1010 1010       0000 0100       1010 1010

00000 00000     0000 0000       1111 0000       0000 0000
11111 11111     1111 1111       0000 1111       1111 1111
00000 11111     0000 0000       0100 0011       0000 0000
00000 11111     1111 1111       1110 0001       1111 1111

10001 01110     0011 1000       0001 1100
10001 01110     0000 1100       1100 0010
00100 11111     1111 1100       1001 1101
00100 11111     1010 0101       1001 0000

 = = = = = =  Question 2  = = = = = = = = =


 Raw Key 1       Raw Key 2      Plaintext       Ciphertext     DecryptedText

00000 00000     00000 00000     0000 0000       1111 0000       0000 0000
10001 01110     01101 01110     1101 0111       1011 1001       1101 0111
10001 01110     01101 01110     1010 1010       1110 0100       1010 1010
11111 11111     11111 11111     1010 1010       0000 0100       1010 1010
10001 01110     01101 01110     1111 1101       1110 0110       1111 1101
10111 01111     01101 01110     0100 1111       0101 0000       0100 1111
00000 00000     00000 00000     0101 0010       1000 0000       0101 0010
11111 11111     11111 11111     0010 0101       1001 0010       0010 0101
```

```
= = = = = =  Question 3  = = = = = = = = =


 * Before we begin, if you want to use a file that is on your local machine then you
     are going to have to provide the file paths for both the msg1 and msg2 file.
 * Also, the data from each file (msg1, msg2) is already stored in this program
     for easy access, and no path is required.

 * Do you wish to continue with your own files (file path required) from your local machine
   or from the msg1 and ms2 file data stored in this program. (it is the exact same data as the files provided on CSNS) ?

    Type in one of the following choices:
      local  -  I want to use my own ms1 and ms2 files from my local machine (Requires both file paths)
      stored -  I want to use the data from msg1 and ms2 that is already stored in this program (Exact same data as msg1.txt and ms2.txt from CSNS)

stored


*******************************************************************************
*********                      Problem # 3.1                       ***********
*******************************************************************************

This is the plain text in CASCII.
CRYPTOGRAPHY

This is the byte array of the plain text.

1100 0010 0110 0110 0001 0010 1111 1011
1000 1001 1000 0000 0100 0101 0011 0000

This is the byte array of the cipher text.

0110 0001 1100 1010 1011 0110 1111 0100
1100 0101 0111 0110 1111 1100 0111 0111

This is the cipher text in CASCII.
F?TZVWLTN,O?


*************************************************************************
*********                  Problem # 3.2                    ***********
*************************************************************************

What would you like to display for this problem.
  Choose one of the following commands to determine which choice you decide.
    all  - Finds all possible values for that CASCII String and prints all of them out. THERE ARE ( 1024 ) POSSIBILITIES.
    sect - Finds all possibilities for that CASCII String, but only prints a section, 5 above & 5 under the answer
    ans  - Finds all possilities (same as above), but only prints out the answer instead
    none - Finds all possibilities, but doesn't print anything

all

 - File is valid, processing continues. -

 * This may take a few seconds. Please wait. Thank you *


These are ALL the possible CASCII decoded strings.

  0. key = { 0,0,0,0,0,0,0,0,0,0 } -> .GG.TXUIJR QQ,'WHNIE?E ALOH.SIBT,WHPVF'UPVPBFL,WWLJIQQU. EFWJS?NYYVANHMYIN.M'IVNBNAPNLBOAJWAZIVNA,ZILPM'XWAT?GOUCKK.JFGOAPIP.XGJHOSNQJT:KWXJJQKA:RYT?P?NXBT,X'B MJHOQFX MAVTPYNZMAX.:N?WNO?IOM
  1. key = { 0,0,0,0,0,0,0,0,0,1 } -> XSFYMZGIYFAXQRMSM,HFD?RAH.HYZYNF:KLYFTMQPWXH.UACQPFDISWZSYBZRZV?'WWBFXMKMWRHVYVJCJIZTEPODV,FSYVJD'.DEYWOKJE'VOUEFOJVHT',CLM,DZQZMJR XZ I,SPFRQEWYZX'VQV??B?:SMBDIRL XDTRIAWR,IZJIQ?W'LLS.C:BG'
  2. key = { 0,0,0,0,0,0,0,0,1,0 } -> IOJ'.SIOJ'LZZIIE.J  :E.GXGD'IQP L'D,:MICBN?CLLMEFIJFPZYHD N?AANZNH,NUSWK'J.DEQLLPVDXO?PIR'ZH QLLA.RHF S:XSHYUWYCUCNUAHUIVP YOAY??W.FKAD'KB:BPJIQHF?XEHNZMVP, U?BZKAFK:HTXHSUHR.NXEPSFTJENRPNDV
  3. key = { 0,0,0,0,0,0,0,0,1,1 } -> MNCYWCQ,OZDVR SQZRDAO?DW.CLY P.RHNEVUOQSCB:NUU'EFPFGRJMXWTOUQHXJJHZJLSM'YWRALPZ?PGEQM'FY S,OIPZ?WRSM' AYKNL..'KCURGXI.GIVIDPMQIXXFWKC V,NN?EYZEGMCT.NXZJH,PVJFFR?VEKC.FF. ZRCQT?.HPXNWPQ.VXNVT
  4. key = { 0,0,0,0,0,0,0,1,0,0 } -> ,MV.VZ A ZQCQNJ,BFCGXETMJDK.AMRP.EXDVUJTWDRVFXN,PNQAURHVDLE,NG:O?SGCJJTUCN.YIMFFC?Q?XJVCG FIHMFFKKXINUYWXWHXJRV:EAADJURCCRS?HOWBNDBTQHMQAGIXHTKAQCHXJV?O:YEAHMKHHHAUATIDDHOT ZS'DPZHMLI,NVWG,O
  5. key = { 0,0,0,0,0,0,0,1,0,1 } -> :YWY'YREVVPBCGX,GRJB ?FINTJYHO.BXQ:MTFHPWE,??STOUZUJ:QJRWP PVN'YZGFFBZXCCWR. OFBAXXPBADGA?BNAOFBN.?LW?CGKJLUP, MCEHDHWJWBNWQB?MRHAKRXXUESC TRVEWQRIU U.YYXMGAO,LLQERHFEV IFRKJKK I.IO.Y,.B.JSM
  6. key = { 0,0,0,0,0,0,0,1,1,0 } -> LD,'LQ?C G: Z.PIQOCHYEJO:MF',W DI?UKM'LB LWWLJTIGKYDDYL  ILVEW''H,J QRBGPK.XSWXDTLUR,XHAVMK RWXDKNPHDEGQXSASC LKRIMGQ'LAQR,SKDQTY:GT,AQWAZLX OIQB.MRSL.'HE IBFAJ'HHT,'YPUEJUHQSOUURGVVSINCRD U
  7. key = { 0,0,0,0,0,0,0,1,1,1 } -> HDZYECDWECUDBWF:QZOIK?P',IGYRTNVMTT EMTRBX.PUCFMCZ?MFITPS:M'W.EKLZCFXSXSUWR'ZTBTTET,,,RQAYJG,TBTXBPE:GUQKNETZI.ORXLJYL.EQK'ZKVQP:MNYCACW NM'K:EGGZETZNFKNP DZTWZYULYS?WBSQCRSS:YSYSDNTE:.G,LBV
  8. key = { 0,0,0,0,0,0,1,0,0,0 } -> :OGZTX:IHZ SAZ,WJFIALEDANGH?CIFTX'HTVG,USFPFVM'WVDJKQPY.AMFUZS?NXAVENHEYKV.KOIVN FAT.LBOCRWCJIVNCKZMLQA','AP?FKUACK?JGGO XITNYGJJ'SLAJ?:IGXHJPOA:BYPLP?NXZTYH'F OBHMAF? LAVV YBZLQXXMNXWLW?O'L
  9. key = { 0,0,0,0,0,0,1,0,0,1 } -> X,F':,OIZNAZQSISOSHBT?VAJVH,JYJF:CL:FUIQSGXL.TECPXFFIR,ZRQBXB2.?.MWFFXMKOGRLFYVJABI.DEPOFF,DCYVJF'.DUXWOIBE,VOQEDGJTHUS,BDM'DZ:ZOZRBHZHI,CPDRPAWYJX,FQ.??Z?'CMFDKZLBHDPRHAWPKIZJHI?QOLHS.C:BW.
 10. key = { 0,0,0,0,0,0,1,0,1,0 } -> KGJ,.REOHWLXJHME:B  MEZGXOD:YQT NWD,MLMC N?G?MIEGAJD ,QHEHN.QANZOX,HUR,K?R.BUQDLP.DX'?XIROZJPQDLCNRLFA,:,,H'UV:CVKNWQL:IWX YO Q??O.D,AD'IZ:  KMQJ.?.UHNZOFPYPUXBYCAD,:LTY:SWXRRNYUPWVTNELBPJDW
 11. key = { 0,0,0,0,0,0,1,0,1,1 } -> OFC'WBQ,MRDTRAWQYZDA'? W:KL,PPZRJFEPENUSAZ:HUT,EGXFEBKEXV?OWAHTJKXZNLRM'YGRE?PR?POEQ:'NYBC,MYPR?TBSM'AIYIFLZ.'OCVZGZI.OIWADPMPAXXFWIS V,LN?GI,AGO,TZ.XVJJKPTZFBR?.EIS.BF'PZPSQ??'XP?.WTQ.FXJVU
 12. key = { 0,0,0,0,0,0,1,1,0,0 } -> ZMVZFZDABJQAANF, NCEHE?MKLK?QMVP'UX FUNTVTRVXB,S.QAERLVEDE'NF:O?,GAZJPUAV.,YMBFBLQ.HJRCFHFKXMBFI,XMNT:W,'HZZR.:DIAFZUVCABS.XNSBOLBVQHIQCOIZHUOAQKHZV?O?QECXLCHI AWAUMDE OVP,''E ZNMLE,LNWEKO
 13. key = { 0,0,0,0,0,0,1,1,0,1 } -> ?AW'OYVEUFP SGT,EZJ P?NIO?J,XOZBYI:IDFLPVU,XLSTOUZULMQNRVX TFOWYYOFDR2?CAGR?POBB HXRRA G TBLQOBBL.?LG:GGIBLW ,HMBHHFXWNW VWSB?IRIIKPXXQESK VRWAWQZIWPUVYXPMEQNSLMYEPHGAVAAFP,KKKAQ.OO.U,.B.HCM
 14. key = { 0,0,0,0,0,0,1,1,1,0 } -> MT,,?QXCB':BJ.XIRKCJIEFO?EF:KWDDH?UK:'HBALWS?J?IE,Y TYH AALPEV''JSJBARFGSS.ZCW?DUTUPKXLAWEKBBW?DI.PLDDCQ,,AQS  KSAMEA'HARB,QKEUTXUGV, UWCRLZPNMQ VMPCL.'IM KBGMJ. HVK.:PTMJWHP'OTERCVW,ILSRFPU
 15. key = { 0,0,0,0,0,0,1,1,1,1 } -> ITZ'UC WG,UFRWN:RROK,?P'ZAG,BTJVLLTFUMPRC .VECNMAZ?IVIPPRUMYG'IKNRCDHS?SUGR:JTFTUETYK,VQ QJEKTFT,RPE:FQQIFEVJIROSPLHILZERS'XKWUP?EN,C GWBFM:,?AGEREVJNJKOX FZUWZX:L,S?SBRYCPSRUYRIS NUM:.W,NRV
 16. key = { 0,0,0,0,0,1,0,0,0,0 } -> ,ME?P?:H ZBCAZZVNDXOHAD F'XTGMFUP'JDVC,T,FRNPN.V.DHIWBX'IMDEZW?O?CTKJLEXCV?,OMVOGDC?ZHBNGQUSJMVOGHXCHUA.::CXXBKTE ILJCGNCZK?JYFKN:Q?AN??AGZ .S.MUB,XXQ:OPZVIH,FAGBY:AB?ADAT.F:BRDQZHMJXVHUL''H
 17. key = { 0,0,0,0,0,1,0,0,0,1 } -> :YD,Y'OHRNCJQSHRHHQBPXV BVYUN:JGUCNMFQIP,GZBJGDBXXDB:QZ,ZQ HB..:ZOUFB?MJGGP?F:VKA KPBAPNADYTC:VKA:?DS?WNNAGUPKQDCEHDHQSZFFOQBJ?,HYPRH.HHSCRJTPP'QJZU S':TZ.OCIFECR:RH PS AUXOMZF I.AOHHR,AERWZ
 18. key = { 0,0,0,0,0,1,0,0,1,0 } -> LEHUZVEN WNHJJLD'AP IAZFPGU::UTAFWFKMHMBHN.OK?HDOAHDDYPIMHLNQEN,H,Y QV,JTR?RUUDMP?FR,XXHRMXZPUDMGLPB E,?YXJ,SR:BRILGQH:HU,BS,SP:YM?T,ED.AZ' DI?YB..ZCJO,GFRIPQXCQCQT,YLUQ:Q'?VBFQURGVPNDLXIZDS
 19. key = { 0,0,0,0,0,1,0,0,1,1 } -> HDASSFQZERFDRCVP'PTI,X VUC?:TTZSBFG EJURIZ'HCWZDOXDMD,DY.?MGALTKHZXFHVM.QGPU?TR:TMGSY,NXAAY:YTR:TAQE,EIXNDNTZ,OBVYEJIZOHQCFRYQ YYDUYSDVZDN.EMK KG,VTJXWKBKRDZBBSTVUYSZBGWPXPUULTWXRL.STP'?HZVQ
 20. key = { 0,0,0,0,0,1,0,1,0,0 } -> RMTJF.D FHSKEJFZHNAUHG:LCLILQOWXWUIHBQN?TOCBV?BZ,FHQEVLWEV:O.EHGT,EQZNLYFEFS:OWNJLSNH,SBNHWK?OWNACA:.W?VSGYJZR'?LQPF.QVBIZBNXJSCGL VUHHPDTXJHQO QIJJZRHGTA:C?HS A CWUVPLBBMFPY..BZKFIHEZDNUUKK
 21. key = { 0,0,0,0,0,1,0,1,0,1 } -> TAUOO:VDUERBWCTZMZHPPLOHG?HKX''JQIEA B??POJHLWTN:ZD?MUNSWBQDFLFUQODTR.LKB:CTT'GJHHZBBBAFHTSNU'GJD.M?G.FFAR:GP,ILJUYN.SNVHFFCBXISAIIV?ZPDWQQFRSAVUXKGPQFUP ?GUJCDEYGV?DX.FCD ,,JJFCOOIZUZVB?XCI
 22. key = { 0,0,0,0,0,1,0,1,1,0 } -> ETYK?UXBF?'DNZXHZKAZIWGNTEDM,TUL ?DCY,PJBFOC?N?HMCHPT:HAES: UWZSBSHRAVFOSAOZWTML:TW K,M ':ZJVTMLAFA?TEBPSCQASBAJ,IUIE,H ZZKAKAUUPUE.OCTVD :JPJMPDUO CHZSAUPCFCMBV J.O:PXUNHGHB.NU.BMRS,HDSPVPQ
 23. key = { 0,0,0,0,0,1,0,1,1,1 } -> ATXOUG V YWNVSN?ZRM,,.Q.RAEKBT'.DLENQIDZGRNFEGNLIZDYVMPQW'?IG. CFRATHW?'U?K:NT,X:EVI,YWPHQZOOT,XSR U:DPPAVUFZKSN, ?BMHZDZCOHKSUQTELSG FVBL?M,XAFBPGFJJBCGXQH?QWVP:NSG.ZJP,A CQTXPKB JQM?VWY.RR
 24. key = { 0,0,0,0,0,1,1,0,0,0 } -> ZEE.P?UHRBAQZ.VOTXMXA  DOXTWHBUSWJ VB'TXVRL NZV'LHIGBT'HEDGJW?O?,TIJLMXAN?:'MVOFLC.JHBNFIUQZMVOFXXAHTM.?UCZXCOTDHINJBGNARK.ZYFKOMQ.QNT?CWZDNSVMUR,ZXP:OPBVKX,BAERY'QBXAEATZV:FREAZN:J?VI:LYOI
 25. key = { 0,0,0,0,0,1,1,0,0,1 } -> ?QDYI.GHQFCHASLRIXQ  XR  FYQ.:NGUKNIFPMPXWZ ZG BYPDDMQV,,Y JR.V:YOUDB?MJEWPXV:VK HKRRAPN TYVS:VK :?FC:WNOIGWPKUDBMHFHP'ZDNOSRJP,IIPPX. HSSRNDP?'QZZW RW:TB.MSIBEAR:PX TSAAU.'M.FAQ.G'HLRZIERG,
 26. key = { 0,0,0,0,0,1,1,0,1,0 } -> MMHWZWINB'NJZJHD.QPBYA.FPGU:MUPAD'FK:IIBJN.MH?LDNIH TYXIL LLAEN,JKYBQWWJWJ?TEULMQTFPKXPHS:XX ULMF?P  DS?XPJYSSYBSALEAIUHVSBQKSX:XU?VKED.CB'DTITY F.XCJO,EVAK Q?CRSQVKYHUPMQ,LVFFPERCFPJDMPI.DR
 27. key = { 0,0,0,0,0,1,1,0,1,1 } -> ILAQSGQZGZFFBCRP.PTKKXDVVC?YDT.S NGFUKQRKB'JSW.DNPDIT,LY'TMEQLXKJJXDHWM.QWPQLTZ:UEGQI,FX QY'ITZ:UQQG,DAXOLNVZ,KBWQEHIZGHRKFPIQHYXDU,CDVZFN.E:KLKECVVJX,K ,RFJBFSTVU,CZFGV XVEUHTVHRHNSPP.TH.VP
 28. key = { 0,0,0,0,0,1,1,1,0,0 } -> SMTNV.  GXSKUJJZJFAWHFULBDINAN'XV:IJRQF?WGCFF?NZXNHQUVHWGN:KNELGTSESJNDYGMFUMWNK?SLXZWBOPWOLNWNCKAYNWXVPWYHZSW?MAPBNQRBKRBLHKWCFD VEHLPEDXHHPK PAJHJRLGUY:GLIW  HCWEVXL JMD YR. RKDIHIZFVUW,K
 29. key = { 0,0,0,0,0,1,1,1,0,1 } -> UYUI':RDTURBGCXZORHR MGHFTHIH.'JPAECPBT?SGJL?WTN:RDZ:UJSWRQ VLBURGDVB.LKCUCPD.GJIXZ BCEFIDSNE.GJFVM?W.BFCJ:EP,ALKEYJNSJVJNFABXMS AIRLZTDVAQDRREVTPKE QBUQX?GEKGDDQGRLDT.DKDBK,JJDKOMIZYZVB?ZSI
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737. key = { 1,0,1,1,1,0,0,0,0,1 } -> XMBTBJYR'ZM, APSNLRCHOL.WAYTEPVR,VH,W:GSPB??BELQDMBCERLZULK,YA?H?R,A?ZII'GSAMPZ.ATV:ZVVPF,'JIPZ.NIWOHIM, .EMRNVWSDANRYWGKDZ ?JYFLNUEORIZY:.XS?P.MHJPRNR:HXCTVKNBPVDYORWRFXA..FYHWXQTT..PSHULOL:
738. key = { 1,0,1,1,1,0,0,0,1,0 } -> :LNTQQQTLKAWPHRU:EV ZGRXAXTRV J HOLVGDSWGST.Y:BWRTNGWBP?BPG,ZZ NZJWGOAM,YNWN. FX MZQHONVQRSEP FX'T,C,RA:N?IU:OWUEHOXKNKMFKMPH IJHDICQPV'NGTQUKRKNR:T:IANKZYVHVZVD:UCAN.T:YRXEB E:IYXLGPU,D I'D
739. key = { 1,0,1,1,1,0,0,0,1,1 } -> NIB'KX,FJ.EZHJPGN WDSU.JWDP'LBHD,BL,':EGAGUWK'LA PGA.I.NBYFZSJX.IVSN:HWO'KVNLB?HRQVPQMDDQCRDBB?H,EZHSQOKHYA:':WGSDFSSGE,UOEPAITXXPM IRXMHSTXUBH,HOY:O ,.XOX,B.LFVIU YL?PXD.U: REX?XUTNRG.PDFF:
740. key = { 1,0,1,1,1,0,0,1,0,0 } -> :X'WFUSA.HYDMWDI SB RNGMNUBWQLYJEJQIZVDLG'B,NCTKT,AF'BR VB,QTFNDZFNDPPNEAXC.ULEH AQP VGCGUOLULEHM'GANZTH?F:URSAIE?QCV?L?FOCQ L:VH CFTPPJ'DTTPFYAS:WUBENDN?YS:DYFLX GDNP.GVC: BJOGFMLQEGIIGVDAV
741. key = { 1,0,1,1,1,0,0,1,0,1 } -> XD, .TLQSZQ:CDEH'FGKKZMI,:AC.CESZVNYES.J.TCFVDSKYCW KG XRTFZW'EL ?ZBOX,?ASLJSOEKZE:U:JTKUBQFHMEKZKZFALHXZV?XXPO' UDOEBN ,B?J'WDNEGGVYNX,?QYZEKEAASXHFL : :ZM:ST??HGVWJNTJGTBIP,TBDHH?I'MW'AH.
742. key = { 1,0,1,1,1,0,0,1,1,0 } -> :?WXGUQUIHPGV:FYQVGHHUG:N OX FWHAG?NQFBZCJOT:ZV'TFMGUP TEZVQ?:TFZCNC,BXWR:FTLFW?DDXQZMGSTXBKDFW?Z.JOOQD?K'KKCYAQ? :?.HBZNPZFOBHEKAUBR.KE?:A?KC X'.K.TFNYP?.DKRLMEAENN?RSKTAPTMRSHJZEEY.NSMKF
743. key = { 1,0,1,1,1,0,0,1,1,1 } -> NASU:LSGOUTJNOHOBRNDAWKK:DCUJUULRS?EYNXJEFN:MZKMGBEI?YZFEKWVWO VI'BBYKNCSYO?LUMLRX?PSNIEPICJFUML.NKBWSJNMZPWK,OOSE?MEEPZQ.GPC'EPXAODM ?LMQ:TSU:SED,WKFBV:MQQD:MB?AED:?LXPOO'YRFIP'IAB?KOXR'HBN
744. key = { 1,0,1,1,1,0,1,0,0,0 } -> 'XN:BCC ZJH.KQPAHP,HPLFLF:X'EXXBIK '?DEABVXWHGHGTYCDMQFHVPB,PBZL,G'NTS'IMZZNEXPLD ZPBEVBAW.LAXPLKD.IZYEMX?L:TEUABEJSP.M:CNAQRX?.HA NPBPKXO??FRHMZ.U:TQ,LJVP,IF B HQO OLVHURUVQVCH:?PWVRAOLLJED
745. key = { 1,0,1,1,1,0,1,0,0,1 } -> ZMBTRJQR.JM, AXSMDREHNH.UIYVUQ.RZNHYG:OSQJ??BE QGUBAERHZWTK'YAXH:Z,CLZMI.OSC:Q..B?V,JWZPGS'NYQ..NAWIXII,?UMP.V'SDQNVIWCKEZ ZJXBLMEEORH.Y?VXQLQZMIBPP.RYHYKTRKONPTLYOBVZFZI.?FX WZYTV.'XSKELM?:
746. key = { 1,0,1,1,1,0,1,0,1,0 } -> '?NPAQQTMKAQPIRU'MV ZGVXBPTPV F I'LTWD,WF,TZY?JWPDNEGCT?A G,Z,DN,BWE'AI,XFWL. BX EZQHNFVPZSCP BX:?,GKRE:N?IWMOWUFXO?,NOMG,MPH .JHDIGQPR'OOTSUJVKOZ:VMIENJRYVHVRVDUUGAO.T'QRZUCLE'AYZ?FPUYD KOD
747. key = { 1,0,1,1,1,0,1,0,1,1 } -> MIB,,XSFKNEZHKXGMHW SUZJULD:?CDDZRLYO:MG OUSK. AC GC.HZNAIF.SK?.H.SLMHSO.CVL?CXHPYVTQLHDPKRBCXHYMZLCQKKKYA'O:'GQTFWCGA,T'ETAHPXZ MDYS?MI,TZECL,IGY'' '.YGX:B'DFTAUDYM?PZL.W: .EZTXWTOZG? DDV:
748. key = { 1,0,1,1,1,0,1,1,0,0 } -> 'P'UVUSA? YFMV IASB BNCMMMBSAL:JDBQOZV LFGBYNCPKU,ADOCR WJ,SDGND,VND QNEAXC?ELAH IQPPVOCDEONELAHLOGCN,PH:N:UBSEIFTQAV:H?GWCQPLUVH CDTPTJ:LTT FYAQUWURDNDMTYQMDQFL EDOT.FNC:PCNOFVMHAECIHOV AV
749. key = { 1,0,1,1,1,0,1,1,0,1 } -> ZL,?DLYSXY:ADEL'G'KMJMM,'ACZSEWZWFYAS'N.USFTDS?YBO IG PRUNZU'EL :BBIXZ?AQTJQ'EOZFUU,ZTGUBAFJ:EOZJJFCLI?ZY.?.HPK' HUF'DFNA,BZZ'WDMUGEVXJKYTQ'JEKEAIS.HFL 'H:X::'T.DHEFVNNUZGTBHT,URDNX?M'L''GH'
750. key = { 1,0,1,1,1,0,1,1,1,0 } -> 'TWZWUQUJ PEV?BYPFGHXUC:MPO.PFSH O?JQFFZBZOV:,R'UVMEEQ TDRVS???F,SNGKCPWPMFV?FS?DLXQJMOSVXBITFS?,.JM'P ?JWX,,KGYBY?B::ZHCJNPJFGBHECKUBV.KM?YQ?CCCP'ZK'?FMQP.NDCRL:ECEOJ?SKKPQQPMSKHJJEAY'FSIKF
751. key = { 1,0,1,1,1,0,1,1,1,1 } -> MISWML,GO:THNNLOCBN QWOK'DCUZUQLS,?AYO?JDVN'M,?MFREK?XRFDCWTWNHVHGBFYJFCQIO.?UILPP?TCNEERQCHVUIL'VK WSNNLRPS,,KOQM?OUDTZPNGTS'EPZQOF:AXLNY:PCUUSEL,SKFJV'EQST:EB.QEF::HXQ'O,YRBIQ'IGR?OOYZ'NBO
752. key = { 1,0,1,1,1,1,0,0,0,0 } -> X,LWFGCLRJJNKAEIMRYHVHRDBOH'A?XCAKBO? E JVZGXEIF?YALISS .P KPFZM?E:.TR.HEZX.E?PMDCBZFAVJIW??A?PMCD?A.:EL?.NMTAU FGHCP.L?ALC,VX:'MCX.PFPJPO.LFBIAR.WMTPZMNTRKYDAC ,A' KLW UCUPUVB :. WWGIMN?'ZET
753. key = { 1,0,1,1,1,1,0,0,0,1 } -> .O VTNMZVJOK CI,KFPELJXVQBA.SU.SRNJIGYORYJ.LRUAPOU GAPYR'TIOYEXIYYYS?,LHVOQS:U.'BFGWNSZXOS:.YU.'FAUI?MIZXWO .R'R SLFIWBJDYBV.,CMK'T'RL.XTVZALQKEABR NBXI:HVBKMOQS.H'BRZGRIGTB? VRYVFN.I,M':::L.
754. key = { 1,0,1,1,1,1,0,0,1,0 } -> X.LXGUA?EKCAPKW:XOTH.CRPBSMPPDFAA'NDW ,VN,VJI'KVXDLMASQTI EK2'DOX UU'BHZPFU?.DBYDGKSLJV.XZQSEPDBYU?YOOVE?O.KGMKWIF,ML,INLAYORLB'KIFXWQTR.GOVCUH,CG2'FH,DOJQ,FXVSW ODWAK.UWQJ?QGLDWA,J?EU:.FQ,OF
755. key = { 1,0,1,1,1,1,0,0,1,1 } -> OJ U'?OJCNGJXXYOOKUNUQZBQFA:XGDERNIOYMFHOWCK.A K EIZJ,FIIDNSO?'H?Q?:KRNVCT??GXIWBOTUHXLXKPRRGXIQMXBEUKJIZCOOY'FUVDGCE ZS:GTU,QYZZTTYW?LA,VJEA:SAG,OOB.':EZMB'EGSBETYI?QRLO'YD.DRTZGDL,O?Z:TFN

756. key = { 1,0,1,1,1,1,0,1,0,0 } -> WHOEVER THINKS HIS PROBLEM CAN BE SOLVED USING CRYPTOGRAPHY, DOESN'T UNDERSTAND HIS PROBLEM AND DOESN'T UNDERSTAND CRYPTOGRAPHY. ATTRIBUTED BY ROGER NEEDHAM AND BUTLER LAMPSON TO EACH OTHER

757. key = { 1,0,1,1,1,1,0,1,0,1 } -> RLKLDNXRPYMK AL.O'I:JOLZWAAJSGVRWD,IW'OVRIWDDWLQ LQYGDPSULX,IGMAURZYX.? VGR'YGNRNUWKZPGTJADJYGNRBJDSLM?RQFMHWAVSHPDF, ZFISSJZ,WLEUEUFKCTQDIOJAKDAKCNHBLAWPLH:YO?VDJUFGSFRXEDBJUZRPFF?XM.D':OL,
758. key = { 1,0,1,1,1,1,0,1,1,0 } -> WLFJWWPTBHAARXBXXFEXXEB?EPMNPVZ EM.DED,V X.F:'RWRU:UEU UFPTSZ.:GSKWWKGPVPOWVZVFTLLZAJIOR.X MPVFTS.H:'TTTB'IKKXFUJYML,YR KJ' JB,J EISURKRCUEIQXCBGJNJK,?GEA NN CZD:GSU?'TWII QSQLWIJJLAAXWFQIOB
759. key = { 1,0,1,1,1,1,0,1,1,1 } -> EIBGM.ZFG:EJHJLNKBLPQUNJWDAEZUHDWY.I'MMBEM.OM'?E P?,??RGBAUZSLIW WSVYNFBVK.VXUPDXP.DCJEDZQADRUPDWVIPWW.FDZHCKZVGYULGQ XRXNVDS,UXRQMV:AADFYL CQURANJCKBJWWMICTYYJVQGV:'MTR:MKYPCHR:KGVXONQZ:NFK
760. key = { 1,0,1,1,1,1,1,0,0,0 } -> YKLUVGGLSJJJ,AAILZYJVIRDCWH,A:PC SBML E K.ZAHEAF.YAHYSS ?H K G.M.M:?DSZHDRX?E:TMECBXV RJH'?XA:TM L?CN:AL:NNODAU G'HCP'H?BTCYFXY'LKX.PFTJQG.NVBIASVWODQ.MM?ROIDICACA' JDWCMCU T.BCU.BGWCILF?XET
761. key = { 1,0,1,1,1,1,1,0,0,1 } -> 'O TDNIZWZOKPCM,JNPGLKPVPBAZCTVSSVJKWYGRXB.LBUMPLM CQPQR:LIKYE?I,QYQ?ZHHWGQQMTZ'CVGU.R.XN,:ZITZ'FIUKLMMZYGOBNRWRACLBYVFJDYBTH,GMJWT'RMZXU.ZC?QKE JRBNB?I' VF,MCQRFH'RSRGPVGTB:HVPQVD..M,LW:'L'
762. key = { 1,0,1,1,1,1,1,0,1,0 } -> YNLZWUE?DKCG KS:YGTJ.CRPCCMVPDJA ONFG SVOSVNY'CVZTLIQSQTJPEKZ. OZHUWOCLZQNU..DFYEGKQLKR.YRQUPDFYWTYM'VA?N.KE:KWTGKMH,MJLBIOP?B,KHNXSQTV.FGVAEHSCFR'DMZ OIY,FHV,WA'DSAJ.UUIJXAF DUI,HLEQ:'NQYOF
763. key = { 1,0,1,1,1,1,1,0,1,1 } -> NJ WO?KJB.GJHX:ONCULUQRBPFA:HFHESBNK'YEFIGWG, .M HPEIJJSFJYDJSNX'HTQ.:JVNWKT.LF?IVROVUI?LYCPTBF?ISEX UUOJHZCM'YWFTFDCSDDZQMGVE,UY,RTPIVXL SVHUAUS O,HOBZ''MZKR'HGRREPYH?QP?O,YDRDP?ZETL'O:R:VFO
764. key = { 1,0,1,1,1,1,1,1,0,0 } -> UXOGFDR VHIJKSDHHS PRNFLFU GAOHBEHSM?VEDC:SKNGHCPQPV'FRAR Y,PDOERF'TPTNDDZSPAOD HAS RGBOUMDAOD E'EQN.T T.DERSTAH? CRX?TNORA H:. AVDRABWDEDPBY S'GEBANEF?HC: ENDXBWDLMRCTAM SKNCDOBUAGHAGTJER
765. key = { 1,0,1,1,1,1,1,1,0,1 } -> PLKNDOPRRIMK AH.NGI,JNHZUAANCF.RUL,KG'GVPAWFDW QCDQ,GDXSWDX'YGMATZZ'X'? WOR,IFFRH:WMJPKTJQDNIFFRCZDQLLTRVPHHX .SH DBKARFH,SLJ,SLFEEWVKOTS1?IZAKD KCHHBLAU LJMYK?T?JWVG,FPHEDRJQZP FDLXI.EW:MLZ
766. key = { 1,0,1,1,1,1,1,1,1,0 } -> U?FHGVPTAHAGRYFXYVEXXEF?F MHPVV EE.FUDSVCP.D:.ZWP::WUT UEXTSJ.UGRCWS,FXVQGWVZVFTLDZAZIGR?X KPVFTR.H'OUTTC'IOKYFUIIMH,X. JB' ZB'J EIQERCRCEEMAXKBFZNNKZTGFY L. GZDMGQE?'TUQIDASULUQJH?AEXVNQKOB
767. key = { 1,0,1,1,1,1,1,1,1,1 } -> FIBEM'RFGMEJHKHNJRLTQUJJUDAEJTDDUQ.KOMEBEE.MM.PECX?Y?:ZGAIU.CLAWA'SRYONBWC.VHT?DZX. SJIDXIABBT?DVNIRWWVFEZHGK,.G,ELCAAPRYFV C,QXPAMTHAMDEILDSQ:R NJGKBBWUMIADY:JTAGTM'MTPMMOIPGHP:KEFXKNPR:LFJ
768. key = { 1,1,0,0,0,0,0,0,0,0 } -> HJJS'KGOIOLZJIEEH,LIGEPG,WAUHQDTXSD:MLECS.?MWHAEFYGLJIWHA:NZAKFZLL,LUS,K?B.MDQTNTCDZW:PIP'ZBJQTNV,RDG CONBA.EMUCR.NSQLI'QUE,GJY?:K.D,JTIKBXF, QSKVQ'ECFZN.T:PTH YSDDKFP ,USYIXFX,EPSFTFE,CUHDV
769. key = { 1,1,0,0,0,0,0,0,0,1 } -> ,NF.GB:,OZI,AJSQ,'DONGHW:CE. XVPK.EZVUGQ BXLU.OST:FHS MXELO,H,.J?Q'MWRA'OGWMFXZ?GOE:?.JYPN,KHXZ?VJSIOAMYHFIVEOUQABJRX'GICQM:?GNN.WOSAZ,M.?GIIKGXJTVEJ?JHCPVJFBR'.EOS'RDHAZTCQT?HQFT'VPQ:.QOMU
770. key = { 1,1,0,0,0,0,0,0,1,0 } -> H'G?.YE'.W ,RSSWHNIA:.PS,SH?IC.VXOH?UFGWW,UBFGWWUTJE ,Q.W:CPZRHXL VGNIMY?:,OOCFZPFM,'GP:ARWOKCFZAC'JVIC'YSDT?GCUV,FRKFKOUHIZOXOJ:O.IZXV:?CPKZPOQKSYTLQHX,Z:RC.ZTYGAHJFJB,XVVHJHZ,XTSLOPWLB?K'L
771. key = { 1,1,0,0,0,0,0,0,1,1 } -> ,KFU?ZKIZ.AZYASE,BHFT:RAHFLUKJHF.K Z.UEEDGQONUOCPXK YR'LRYBZBRZ??UWBV ':OKRBGJHHCRI?TE?OGV.ECJHHGG.JTY,O:,EYVIUEEGBSROQ,CDI:TQUZNRR XQLIX,U B,:UXGXYFXZ?HGY,CVPFJBI X'?RHDZ'JARJH??UUFREHZXFGU
772. key = { 1,1,0,0,0,0,0,1,0,0 } -> MX,SOHRC O:FJ'PIACNACEDO.EKUHVTP:HUO:.DBTTW'GKTID,:F.JN E?LPELS'JFJDASNGQC.UBVDFPAUPQYDAWUKJHVDF'SPLUDWCNCHTSK KUDMCA.?WVGVQQN:TX GR,HAABRIPKDQWB.AUCVR'HEEIBFAH?PMR,TADTEJY,,CYTMRAFWSI,KWDPT
773. key = { 1,1,0,0,0,0,0,0,1,0 } -> .E'.ECHWFSYCCLJ:VGOEJW?'XAG.ROVTM?THTVNPBH,VUIZ,S'U WAXPEUMWNNKKYZFESSTSBG':PONTBUTQH,RQW?JKZONT,BPA:GUQHFA?Q,L:CPHFHMREECWQHWWFHTN'CAOW FMY,MKGQJE?ANHKMP BJU'ZZ:L'C:S BICTCRQYBYSNOTI::W,AIV
774. key = { 1,1,0,0,0,0,0,1,1,0 } -> MTV?LZPWWGQOPUF,A.CIYND'. K?KVNR:EXFGTVVPQWPVRB,QVQGTX VSLIZ.FMYJKGCZJXUU.S'IVVRTD?Q,RDQDXFGIVVRHKTJD'WWYSM.JRV:QADJ,T.CRJSP,NSBXEO:XZCQQR 'HTOQB,H.JVLY.ALDSLC??EH?XD,FPPOVXI:'PP'A?ME,LKWCKN
775. key = { 1,1,0,0,0,0,0,0,1,1 } -> .AWU?XREWVPJYWJMRRJDP:JIMDGU,OXB,AQ .FLDBM,:?BZOWBPH:QZDVH VVU'YY'F RCJUFJRRQOL BXXPR HGA?GMQOL NN?BF:OG:ZLUPRLMCU GBMDWA.ZQBWERHAKTHSUEQCDTR::QUWIU N.YMUHEAUMNLAATHHMVBLK'H GKBT.GETKMHR,HCF
776. key = { 1,1,0,0,0,0,0,1,0,0 } -> IZJQOKCOHOL.ZIMEICLKGDPGZGAQHPLTYKD':LECRV?OGHIEDYGHZISHC:NZQJBZND,NES'K:J.ODPPNUCDXW:TIQWZFJPPNWSRFW GOORA?UMUCSFNSALM'RMEYWJ:??C.B,JPIJJX K :SJ.Q:EBBZOVTYPU XSDBKGX X:S'YYBXXMPQFUNEZKUJTV
777. key = { 1,1,0,0,0,0,0,1,0,1 } -> ZNF?WBY,NJI,QJ,QZGDMNFDW?CEZPY.PJ.EXFUOQAJXNE.CSW:FHC IXGTO'XZZJ?Y'OGRE'NOWOVY.?FWE'L'NYQF,OXY.?WBSK'AIYIVITUO:Q RJVH'CIAIM'LCCNOVWOS .,LV?AYIKGYBTTEJXJIKPRJGNR.FEOC.ZDJIZTCPP?JYPV'WXQ?VQM:U
778. key = { 1,1,0,0,0,0,0,1,0,0 } -> IGG.NYA''G 'BSSWI.ICM'PSZCH?IB.VY'H.EFGWVSU VGWWUDJAP,U.WMCTZSLXNHVE.IIY:V,MOBBZQFMY'FT: ZWOKBBZ K'HFIG'XKDVLGKUWCFR,FOOVXIK'XKJ?G.MZXR::KPOJPQGJ,YVLPLXZR:TC.RTXWALJGFBXPVRXKLZXPTQ?NPWMJ?IOL
779. key = { 1,1,0,0,0,0,0,1,0,1 } -> ZKFWLZOI,NAZIA,EZRHDT:ZAIFLU,KDF', XNUMZEOQM.UCCSHK IR,LQIB.BS.??:W F ,:NCR WKLHBBI.TDXOF..CSKLHFO.HDY'O?,E,FT:EDWBWBOU,ATI'DQQZOZRDXPHIYSUDR,UUYOX,FX.?IOY:CW?FKRIDH.?RJLZ,J VJJT?WUGZEIRXDWU

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999. key = { 1,1,1,1,1,0,0,1,1,1 } -> XI.'.LKEZ?Q OE.MWBKBPH'IHMN'Y'ANRKPJXELHENCWNANORRIBMRVDPCR?VE.T?NGFB .Q IJRW'MLAPY?BDQGFTNAW'MLK'NHFXJNXRUYPBYMDMYGDNPZD.B:RUYRNQJNL ?L,Q:XB'IURD,YP?.THLQ,UWMBJYAN??XZEGBUZRRKEGLGSF'MMZZNCE
1000. key = { 1,1,1,1,1,0,1,0,0,0 } -> HAKQYKWBMGMPZ,PAHH.CQWFNP:XQ.RTT?ZEUM.YGS.?,Q?TAAANFLZFHEEGTSIFZNORDUSKOXC'ETRDNQHW.AN P'SJZRDN:X,NA SKNY VG'IGT:O:S.Y'R.D'QXX?'HENKHDMOCYRORT'OVQWWQGZJ.TWBFT UP:N,TL 'UR,'ZNQ'EP,TVRAYHL DD
1001. key = { 1,1,1,1,1,0,1,0,0,1 } -> ZUOZA QRK,IUC,FQZLWEXUH.UA??VXVPOVDRTWSQDBYRAN.SUEO ER?XELNQX,NJ:R.EWPQ'KGVEVXJ?B?V,Z?ZPTNZKXXJ?YHRMIC:YK:H.G:AQDICXX:WHEZM,JQVNMEEESAJ,I.:,MXNK?KU.GXMJLBQ?ZDFRTD?ES:NDM SVUR?UMPQ?ODDQ?UHGMW
1002. key = { 1,1,1,1,1,0,1,0,1,0 } -> H?N?X,EVZOAQ CNWHU,K,LPZTXQ.' JV?OITWD,WS,TVBWJWP?KOFHP.RUJZZPHXNCWGNK:YX.ZO' FZUM'IUPTERVE, FZKAV PIS'XXE??EWUPXO?KD,KRKH.YJ.J'LLGJZF:XBP:N J:ORX??CIX',?ZQ:FTQMXFZD.B'Y'T.HTS'YT,L:LWOIEK'N
1003. key = { 1,1,1,1,1,0,1,0,1,1 } -> ZPGUZXKD.. TISFAZALB.NHDDUW:H?FZJAR.GQA GP:JE.GUPBHO NLWQKPPSJ?:V.JVBO:KJ,JWHXHFQ,ZBWPFCV'OSHXHNEW R,KK?PEQTFAA LCYP:A,A'I,BCDZMQHFXS?M?ZTPFHXY?GYQDJK?LGXSQDDFBIPFXMXRMD,:? BCM?::GDFAKQANGG
1004. key = { 1,1,1,1,1,0,1,1,0,0 } -> HXR,MOOCJM:L?? IACGKSUUOZLB'ZFA?UJTCK:DNS'OWWIDIDSDNNHR W.XU?NRNOKNAQRGTHFWTFEJUAU.A:QAR:J .FEJ,,BLUBVJJSQZS,QKP?TCW:?.RON'QLMT'XFBOZPHK PXIFASG:Z,SDNRM??'FDED,XLB'DXHSNCQYHR:SNAC ECI'KVJ V
1005. key = { 1,1,1,1,1,0,1,1,0,1 } -> ZD.VUFYSOQXKE.ZYRGFMZGM,'YFTB'CXB.UBBDZ? RC.EKJ'WWMHG HP FW'?.JB:ZOGCRDWGLG'F',XFUU,JNGURTCAL',X'RKI:AHXLWYRQI:Y PLN'RLAKO,JESFMUGOWS.ZN:TQY'WGPAVRQMHBH XRNGGV.TMOWMZL BBZS : Z BIVYYYVRKYD
1006. key = { 1,1,1,1,1,0,1,1,1,0 } -> HUWTN'MS?DPEFGV'EVJCI.U,ZHJRYF'.UGXJQFFZSZOXFQR'U.HGDZTVWO,RLW?PNSNMJHLQP:K:'FG.QD:'VVQU OO'FG.LKGJDIV.:KUTHAGYTY?BMF.JRRK.Y?GB'?FMNHB?: YUJF,UCXZTXT?P2YTPW.WP,DIL.TVJSSN?ZZL,SSDKZOU'HK.I,:
1007. key = { 1,1,1,1,1,0,1,1,1,1 } -> ZA.:NLGEXTQBOEZMVZKD M,IH:N,I'ENSCPJHDHHDNCUNAUOSJI MRZDQKR.VE.T:.G B .QCQJPG'ILBXYZRDYGFDNCG'ILJONJFYNNYZU' B:MDEYEDOTZE.B,BUQRMIJL?AKLYY:.R'IUPL,'P:.THDQYEWEBIAAL?:?ZDGBUZRVKDWLCCF,MLRZJSD
1008. key = { 1,1,1,1,1,0,1,1,0,0 } -> MCIY:OWJEGO Z,EIMJ?CUSLBWOHYZVTUTZGEM2YF,..KAOU IALBXYS MEEDSMF,JMPTURJNPC:UTVDOQJGPGJ LX'QZZVDOUXYNEDSJK,BFG,IFS'MMS.X.V?FQWXY:XKU.KLDLGC,BOBIWGVSGWPF,N?VGRDUAUJD.,PLAWUCU, .NPWERKTWGI.K?PDT
1009. key = { 1,1,1,1,1,1,0,0,0,1 } -> .WM?EDMZC,KESK'Y.NUE?QXVQZLTR?VQGVFBTSSPLB,BAL'R:EMFAPEPMLLAX'NKYQ?UG P.CGTUV?J:BFGW.XZX?NX,X?J:QHPCMG:XM'JNGYAP KAHH.VLDYOWNQWOK'TUSEJZA.'K:,'GTKWNWYLKH SLZGSSSFMUSYNEE B.SV?TEPSL'T:YXWXWMW
1010. key = { 1,1,1,1,1,1,0,0,1,0 } -> I.L.?'U.ROCA AS'IWYC'HLRWJ V,DJWTOKDW ,V,,VFRWKVX?ICRIMVZUHJZTHYN UWNY?XP.X''DF,QONQMQ ?MRTU,DF,CAT VMS.?,GL?AWTSZMLKFZJVHJP:H'KXN:WJ.F?PBRMNB,UGRZL? HY?Y.JA.GUU'IVZ .CWAO?ZLTRWYVKLOQ'IKT,'L
1011. key = { 1,1,1,1,1,1,0,0,1,1 } -> ZRE'.?,LV.BDISOMZCXDFZFDD.D'YL?GRJCB.CQ HGRMZG'F:P FK G 'QI PWJ:YT?ZF N?CJYZWLXIBSJ.DSLJKV:'SLXIFEUHV'KJ?RGATBA NAI N ZD:K'DAE,ORYVXW?LTZV V,YQTG,ATIJ:LEZCQUEGF,HVXIXSEDK:XDBBE?'MWFOMIRP.GE
1012. key = { 1,1,1,1,1,1,0,1,0,0 } -> XJK:NNBBUL XX HICE,SWTNRL OZDXTRHVE'.YFW?VGWMTAEQU.NLRAFU?PQNOSFG,.AURFFJ''PDXB:AWNAYQ Z:HLZDXBS, ?UFJBB,AJCX CX?MMSYLRZOWOQHMKWXDROXU CH HIBARG.BKS NSE?EOF ULSXNROD: WHAAIIS?WMCKDACHWKTBDR
1013. key = { 1,1,1,1,1,1,0,0,1,1 } -> RDOFUFXRGA EAZZXZGD:ZGLZWYDDRLJT :WBFUSPEARNEOVSWU?XGDHQBEUWX.KCUZ'WCVDVCNW'RLRTNUWKJJGTZTAEZLRTWRIY:E TD'HBAJLQHHAHH,FDIK'KJACNEUE'WQ'RF:DAY,WFTCGBQIHC HIBNC,ZVTO'WMODE JS A?EXBLORYXQVPE'
1014. key = { 1,1,1,1,1,1,0,1,1,0 } -> MFD.?LRTLAABCV.MVHSY:TZRHHBYVBRRDZDED,VWX.HFURWR:PWD.TWPLYRJV:QFKW:JLLPPWZ:,VZRYD'OYRQTH MAYVZRDKEZDMJRUKDDXCFU?YMLKBNBZB,NYX,JW?D:NHWTUHHEJB,TGZKDXP?QRYE WZW?SDK?NVGBWQLLJYMZWQFK?KU. K?I'Y
1015. key = { 1,1,1,1,1,1,0,1,1,1 } -> RAGMN.FDPD DKAZL.ZIT 'ZH .LKY?TFWARBLGQ EE,ENEVGWHYPMVZEUIP.BU'UU.VPBD.PCC,.S?PDJX,JR YFNDLKS?PDBOLZF:.FQBEO A?ELMAI KXRMVZKBQA.EIH??AADQYLNR,ITTOJOPY.U LIIESYJAAC??'QRED EZPWJETNMGB,LDRXDW
1016. key = { 1,1,1,1,1,1,1,0,0,0 } -> L,I,MOSJDWOFJ,AILB?AUSDBVWH'ZVXUUJGG:ZQFZV.OQOU IQLDHYS NUE SLB,IEPVESNNQK:WTV OPZGRGKDLYWQ?ZV OWPYLUDWJJ,BDW,AFROMIS'?.TLFSGX::YCUZKM LFK, 'BAWF.SEQQB,MTVGBDUATZDZ,PLAUMCQ,'BPUMRIDWCI'C?RDT
1017. key = { 1,1,1,1,1,1,1,0,0,1 } -> 'GM.UDIZBCKACX,Y'FUG?QPVPJLTR:ZQFFF DS'PMJ,FQLWR'UMBQPIPN?LGX.JK,Y?WG T.BOTWV:N:CVGU.Y.X:FX:X:N:S PA:GYXL'JLWYMPAKANH'RLDIOU.QSOJWTQCDNZ V'IM,WGUCWLWXHKHHSJJGOSRVMQSXNEE BZSVPTEXSNOTYYY'XU:V
1018. key = { 1,1,1,1,1,1,1,0,1,0 } -> HNL?L'Q.SOCGPAW'H'YA'IDRVR R,DBWUWKFG SVZSV BWCV2?IEBIEVXMHJJULYMHUUNXXQVX:'DB,P'NS:PD?LZTQ,DB, ITBFMW.:KGNLAWTRJMHKF.JTPJRMH,KYF:WJ'B?QJRO.B,UFZZNLALY.Q.NQ.GUTGIVZ VCUQO?ZH?RUQVI?OU'HCTY'M
1019. key = { 1,1,1,1,1,1,1,0,1,1 } -> ,BE:N?'LWFB YSKM,KXFF,JDEND,YMTGSRC NC: IORMJGWF'H B, K :IIFPWN:,??XF J?BBYXWM?ICKJ?TRHJJ.:,SM?IFMUJF'OJ:BGCDBM ANAO ODZD:K:TAA,NZYVHVXLURVBF,YQUO,CTHN:LMZGAUMGGCHVXHPSEDK:XDJBET'OGFKMHZP?WD
1020. key = { 1,1,1,1,1,1,1,1,0,0 } -> JI:OFBAELFXYDHHSE'SWPNPT IZDTTP VGO.QFUTVEWLTAEYU?NMRAE:?TANGSGO,ZQTZFQB''PDPB'IWJQYQ X:HJZDPBR, .EGBBC,ANCYHCZLMISXDR,GWKAHIXUHDP'XU CH LYBIRFFBOCAFSFLEMV QLQHND'D: UUAEYIW?UUCITAGHVCT DR
1021. key = { 1,1,1,1,1,1,1,1,0,1 } -> PTODUFPRGY AA, .X,WD,ZGHZUIDDRMFTCUW VU'PEIRLEN.SU:?ZGDDQAMUQH.CCTR'SCVLVBFW'RM.TH:WMZJKTXLACZM.TVJI,:ELTE'HFAK QHHANHZFDHC'MZAGNFEE:GQWREMDEI,'FUSGFQH C HI .C'ZTDO:GMODE NC E?EXBN'R:XP.PGOA
1022. key = { 1,1,1,1,1,1,1,1,1,0 } -> :FF.:DRVLAGBCR.LVHWY?PZPPHFYVJRPLZFUDSVUP.JFUZWPUPUD'?WRDYRZV:QGCW:JMLPQ'ZY,VRR,L'KIRQTKPHEYVRRE,EXDLBRT,DDXCFU.IMHKBFB,J,JIX'JULD'.HWTWHHEZB,TFBKDHQ?QPIEBGZS?Q?K..VOBUALLZYIZUAFILKQ.AC?K'X
1023. key = { 1,1,1,1,1,1,1,1,1,1 } -> PQGON'JDR? KA.L'BIR ..H MLOY:?FUIR ?G: EM,GNE.GU YRMVVEWAPXRU'UTVVVBD.PBK,ZS:?DIP,LB QFNTLOS:?DC'LXF?VFPREIP PELMAO JPRL.ZMRQE.FQH.LAMDSILHB,ITUOJIPX.U LIKUS:JBYC.L'YRED EJPSJEDNOWB'LEZXFGA

After producing all of the possiblities, one stood out in english. This is what we found:

756. key = { 1,0,1,1,1,1,1,0,1,0,0 } -> WHOEVER THINKS HIS PROBLEM CAN BE SOLVED USING CRYPTOGRAPHY, DOESN'T UNDERSTAND HIS PROBLEM AND DOESN'T UNDERSTAND CRYPTOGRAPHY. ATTRIBUTED BY ROGER NEEDHAM AND BUTLER LAMPSON TO EACH OTHER

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********************************************************************************
*********                        Problem # 3.3                         ***********
********************************************************************************

What would you like to display for this problem.
  Choose one of the following commands to determine which choice you decide.
    all  - Finds all possible values for that CASCII String and prints all of them out. THERE ARE ( 1048576 ) POSSIBILITIES.
    sect - Finds all possibilities for that CASCII String, but only prints a section, 5 above & 5 under the answer
    ans  - Finds all possilities (same as above), but only prints out the answer instead
    none - Finds all possibilities, but doesn't print anything

all

 - File is valid, processing continues. -

 * This may take a couple minutes. Please wait. Thank you *


These are ALL the possible CASCII decoded strings.

   0. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,0,0,0 } -> PBLRKP.NYA:TUTYMAZXKPG ,:.IZSOODW:VIAMLMYQ?Y?RC,UBLAE:HGUW .Q'QQTPDYLQLQ'
   1. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,0,0,1 } -> PCDTP,D?:I?Y:VU, VYJBNZONBMWY?UTQY'EYTB,:AXRT,YOUSM WDFQUNDS,W'CRDERTX.UO
   2. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,0,1,0 } -> GGEYR,NZYTXX?O,YRGUBJ?TMHSE,IUIRSXV ,WV,YLPRUBUMB'IO.FTAFJETJDMSP:HRUINAH
   3. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,0,1,1 } -> F,APPIZJJPPP?MOM C?DC. :MWM:PWSB L'MSUNKJ P,WIC:CKHLVDDAGNM?JF:WVII,WYBWL
   4. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,0,1,0 } -> T : ,P,CTALDCFXIKRIYBAPRXUCPEX' ZUOAUKDLTQUUXBSRQ VIQO:KRU,.S,UTPJUUHCT:W
   5. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,0,1,1 } -> ..NU :TXXCDFMT W:MROF,OCFAV:ON ?PF?AWRSRX,JX OLCW?A?:DFQ?BFYM .GPK:Y YG:
   6. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,1,0 } ->  HFQNLTWJV UJ?X:KWLG'.AEBB:N'W N ZLPMDEXJV??YRAEEXQ  CZPFE:,TFX'XVD?YXMAM
   7. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,1,1 } -> HSUZTZULJ AX 'ZE. WDQMOHIATF  NWXLKOPFOFJ JQS.NHEYYPFFQIIFTOXUBOGPSQCLPTK
   8. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,0,0,0 } -> PJLP,P.NXA:TUUQMCJXI GL,.VIXCNKDVEVKQMDMXI?:?SO,UJLAU:LGV' ?Q'UQUXD:?QHQ'
   9. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,0,0,1 } -> P,MWPQD?.L?YMLCMB.?DXN.'ZOMQSGEVVT'JCTVM.D:VTA''USH GDBQDKA,ZW,CUYLWTRREO
  10. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,0,1,0 } -> WOE,B,JLX?TS:NK,PWU Z?TMH,EYIUMRRXVBKW.,XLP?FHUMAWIOOFPAFBEVJ.KSQUH?FIJA?
  11. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,0,1,1 } -> ESAVHZHHKPUTVMY,P.UGSOB:MODTSWOVAL'EBTL,K PW.HC:WSAKFEJQGVD,RGQCBILWNJPUO
  12. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,1,0,0 } -> TH:BKP,CUALDSPEAAXZ,RAXWQ'CRU?Z ,EECEKPAUQM:NQZWQHVIAOYK:',?S,QTQBU:.CP:W
  13. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,1,0,1 } -> .FFV GTX,GDFMJJHEYMN?,C.'MV,WSH.T,FHMRCE,WECFR .WTA?MDBQBACWL ZGTNTBFPGI
  14. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,1,1,0 } -> ?GFS.LHPKNOKY WGUXRDO.AEBJ:L'WDNAZLR:DAGKV??D,BEVVQX'C.PFM:YTI''Y.D?DXIAS
  15. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,0,1,1,1,1 } -> VAPZ.HS KHYNWYD.WLAGALMHIA:OA BCLLKMPVYWK JCLKNHKYQMCVS:IF: RSL'FXSC?:BVG
  16. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,0,0,0 } -> XB:X'T.OPAE.AFPLCHZGFCDSVNPXEJWH.ET,QIXAPI.M?WGS:Z?QUYLFR:B?W,IY:HTM?UHPW
  17. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,0,0,1 } -> RLO?E:?:P .PHWZ.TE,PPJNCDZ::'HA?ZD?CO RUPPZXROMC,NYDIPBTZFFY:PKOQ'OYB?ZTA
  18. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,0,1,0 } -> M.TQNN VXFRL.ZAQKWLA?HXQGN?U?Y:W.X:NOBDXXVDH:CXQG?PZLAJPIGORDQQKWW:HM'ZDB
  19. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,0,1,1 } -> HKYRF?? OBSL?J:C,SVEWKREFJGVTRG.XLXMEA.JOBDA'BREMCBPFBP LSFQLAABVBYAOLPTB
  20. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,1,0,0 } -> : MP:TJGTKN?WTQHNYKSTWTW:.Z WIVH,'EQGMLDTKMGXGWWX L,Q,:N,DYTUIETXSDGXU?QS
  21. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,1,0,1 } -> ,D.NP,?Y,MG YBDVXOJZV?WLBHGAU'WTSMDDY 'Z,:CFZKUL.TBVYVVU'LDCZDJKRTVGZ.O?I
  22. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,1,1,0 } -> KUROTLMZYTXBPIBURGUJJXWD QDIKUI,S,TZYQW,YT.BSSTDBGZWZFTACN.LNAVZ:?ZBSMCLB
  23. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,0,1,1,1 } -> CVBNVO'DVZJQ?HXOSXOEUXU HR.'VXRO:OB:UGZGVBPOKVV JLSFLAIHKLWLLBT..BYO,YBWD
  24. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,1,0,0,0 } -> XBNBKR'OQAE.AGXLAXZ,PGAZU.KJSNNE'MFYA:QAQQ.QXVCZ:BNQEMIK:OYNQ,QP?PFQXBMPW
  25. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,1,0,0,1 } -> RTGERP::WE.PHV.?MZVVHLC.UGOKAU WT,FPAG,UWEM?RDC.,.BDIW,:NCPIXPOBX G?BPGIA
  26. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,1,0,1,0 } -> TDFMZN IUDLM' CN:, ZHHXQGVNIXYYWRZ:X,BTNUTDHF:,QKNKHYANPIOO PLVF?UNHV'.MY
  27. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,1,0,1,1 } -> VYBLXHSIFXAHVKAJYCE:CXPEFROOQRCC NX'RRTJF DEOZPEN,BMSQNTLC: RM?VOIJE'XS',
  28. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,1,1,0,0 } -> :HWJIRKGXIN?WQPDCJXAP :R.VHBGHNEZOOSGKEMXYGQZU.RXH',Q:LGXTBFSI::Y,WQZBIXS
  29. key 1 = { 0,0,0,0,0,0,0,0,0,0 } key 2 = { 0,0,0,0,0,0,1,1,1,0,1 } -> ,?.:TU:YUJG YKCIHXVZLZFBTPUIO'U'?KYZULV UJNDWWFB.DYVYYO.FPR'.DNF:JVDWRREI



 922960. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,0,0,0 } -> IUPVBEXTTYRHTZI.TFVS' V,YL L,KFLEDLY E:YTQAS,?U,DTFRJKZRHOJTRMPWL NRKQAZ,
 922961. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,0,0,1 } -> G:GBNWL,UEVWLMWES?L.RPZC:UZ?WMQCORXMR WBU:ANW.YC?USNJ,ZVKPTSYHKIFIQNWGBWQ
 922962. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,0,1,0 } -> YJCIASH AOW:?WVJOZYRPDNISVZCGPKGSDDBONWHAO':X,OIRDURU'.W.BH'.GTYQ'X?HHKLO
 922963. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,0,1,1 } -> CPIJYICEKYYPFUTUELHD:X:MCDLDB G'TF,VHMMXKAGKL''MMVUG RQLZSN VQQ,KD KL?.QC
 922964. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,1,0,0,0 } -> UYZ OEPUGVKLRTUV??,R:,AS?.QH.Y.'Y?FYE?BVG.PWJN SNDIKCQILZ SZKUPW?RAWZZ'RJ
 922965. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,1,0,1 } -> MEPCL'YWTZ,VYORFOYFTT,XGFCTEVIFOD VHDUJDTJQ NVZG?DA,JRS?K ZXMCAWDBD .NZBF
 922966. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,1,1,0 } -> .:REOBQEPFFQH.SLDPG?.ZYE.V:AD  YOANR.GBBP.YLAJZEY: ?KPALN ,O',VYI'DMA B?W
 922967. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,0,1,1,1 } -> MIO WTUFPWGPCS:WY?C.:VET'LXF:BF'?DJWXKXPPOXOIVDTDHD,RYO.ZCRSD,?QK?LOYBLUV
 922968. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,0,0,0 } -> IE?OAF'KHHDP'C'A,V,'QCM N:DTJ,OZJNZQAEMJH DMNOL :,?SJIIJG:,MA M'XHTM.?TE
 922969. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,0,0,1 } -> GESOC:PZW.GKHONL'WRWCUFONC'QLXMPLJS:, ONWFYRCYDO,WANJNRSWWQ:ZMN .M:SCSK.,
 922970. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,0,1,0 } -> XVNOMND:DILUHLNCHYYJSJ.TACWJK?YES?WFDSVDDYZBTW:T.GUPMAJP.JGSRSGJCZXBDMVUG
 922971. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,0,1,1 } -> KROQPC'ID SFYBDZ?KHLLJ?.?XACYQJATFOWWLQ:DPMUIP?.QRUWTC? ZSKHG??T,C UY UJX
 922972. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,1,0,0 } -> UI'EDFKGUKNP'.:V.DBA?QUEHO MUALYXYKUN?VTUSABGOTEXXIKC,YN,MJWWK,WJOACGDTRW
 922973. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,1,0,1 } -> ME,,NDSWFWIRYM,FMAC:UPSGNBQMWHJ?IYEVOUBDFW.SHWRG.LLZJKYJTT'QNDHW,G RXKSBH
 922974. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,1,1,0 } -> Z,'M.?:UDVFUHUIEMRGPRCWUHZSIUSZOOQNZM:JBDVVDZWUU,: TGIKZNHU:?CTF:.DEJAVCG
 922975. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,0,1,1,1,1,1 } -> NIVJQ'WYBBB'BGYHM:CVN,':,N:N?XHA?TJWG.HFBZMNR:?:MJD:R EHZS'ZEAFC,,LORCHXB
 922976. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,0,0,0 } -> : X'RJ,TJG PPVYSO IXIP?ROLA.VNK.RMBIK?NZJOWVZ?:RNDZ,QEMIZPTWQKAZTECWJWPWW
 922977. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,0,0,1 } -> BFPAZM F,NROMZJWCC DE:MKFCFWDODLVL?ZFHOP,.IDTZNKE.BDLLC,NJPBME WMKJDTNJIJ
 922978. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,0,1,0 } -> ,'SU.JDIXDT:LCUI.SMF?EGP JVHDW YCC, ?DCGX?KDW'FP?OKVOAH KCIG'P   .DEWNOQA

-> 922979. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,0,1,1 } -> THERE ARE NO SECRETS BETTER KEPT THAN THE SECRETS THAT EVERYBODY GUESSES.

 922980. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,1,0,0 } -> C::.BRCJXH:SCNM,TNGCRUAZX.JTPNWVE?FERQAVX NBZCCZR,'FJ'YOE.I.TMP.BIWBJWD',
 922981. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,1,0,1 } -> S'MTHQYZ.LGM.CBIRJ:C  C.V?C?WMQF  P?:PWG.LJVCJA.TW,F'JWZEOLIB,JN.FSVSWU'V
 922982. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,1,1,0 } -> PCWXJQPROHXEMBCEJYYFRFB QCOZFWXBPG:BOYVKOXKVEV  KM' W:NWSXEELUA?QWRVUNWYJ
 922983. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,1,1,1 } -> TBQ?KO, KYYBDA:TFJXCKLUPBGFXPP.RP.YOWZ,:KAGQ.YWP O.HUFUIRTDBEGMUWKVQ.::QN
 922984. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,0,0,0 } -> :XQ?EUZNQ WLINPZQTSALXO''SVX?VX?PXM G?.UQXIQE,L'PQQ,A:HGPDKPLFL PCYQUZY.L
 922985. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,0,0,1 } -> BVJ,NDKC'?AMKKORC D NFSBKIZUCHEGL,E?KHOQ'?:YPLSBFEEE?,.VD,?IJSDR.UJX MWEF
 922986. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,0,1,0 } -> WQOCAKWTIOLAXPKEQQMLP'WCTZGICCOCCKIXYH.KIWWPJRTCPLKNSO',KKTONFN:??DQJMVFL
 922987. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,0,1,1 } -> W ?ZCYOMOZH?TUP?KGTU'JJXVNDTNJFZ D,EUAPWOR.XHBHXIBTNAFQIV:FHWQGFRBUYXTXXC
 922988. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,1,0,0 } -> CM ?EYHJLPI  SF,V.PCO?FL :?THDENGOIASQ:ULPQ,C,ELPS'GJGZQMMTLQTY.PIF,SHL'I
 922989. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,1,0,1 } -> SG 'AIPZZFMKHXHIPJQNGUJ.EA':XLI?TCHLZP'BZNSBAKI.V'OGONRSUZZOYOBNFEABAD?''
 922990. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,1,1,0 } -> :TIKGXXH?'XA:YR FXYBC:VUUUVYQS.IPW:BRC'K?WW?.RVUCM'ZIFRQSXMN EWFAQR?.OWCJ
 922991. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,1,1,1,1 } -> SIE,FSJEFKY 'IFSTLXWN.TJTICU,TRDPVUB ,S:FKU'MPTJUI.FSTDERTXDHFMTAHV'MGSOL
 922992. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,1,0,0,0,0 } -> OGHNVWQUPRKLRHDR?LGOIPOV?VRJ:?CID'TSV DQPZYYONLVHVU..ZW.D:A.D'Q.ICDXO  S.
 922993. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,1,0,0,0,1 } -> FV.TXEYZ.LG,XON :'UFF KJXOHVAKDOJY IDUFN.LJFALHJTOAL?JWZGZWYMYF DZIFQDC.R
 922994. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,1,0,0,1,0 } -> P,RYCBALJ?LQXTGFJYJXVG,EP:QKQ ZN:GNDYL.DJ?DKNJZEQGL G:K',A,SZAMQR?KJNLB C
 922995. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,1,0,0,1,1 } -> MAQLOXVIG,JZPGM:DWZ.:JHABGU TP.R?LBZ?'X:GCU:Z:JAK?V,BCX 'P:DPWDSMFS:JXGYO
 922996. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,1,0,1,0,0 } -> QBHFICI:FUXHDFXZYFIXY:T,RMI.HHKWQFLKW.OSFUHA??U,HNQCEWXE'KJJOSE'U,YA?.R.F
 922997. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,1,0,1,0,1 } -> G:JAZYL'PAI KZBJJZU.B:MKJYL:BXSCOJ?LBVCHPYIVHUOKYNYOZG.QNKCDKET'FA:VXJKNJ
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1048531. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,0,0,1,1 } -> LEXKGMMQXNFOBNOPJ:QPR?N?ZM?FE:LTPX'HKZYPXFDMSDL?P.WXZAOXJX'SVSZLTMALCVI G
1048532. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,0,1,0,0 } -> 'NT.QQU.MKRLIQ,.YNN,CPV,PGBNHP RKQKUBQL.MCSUP?U,KXS.:JVRFBCGBIK'JATT MHBR
1048533. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,0,1,0,1 } -> 'GGUYRKHIKIPUGJ.JBNFMXXIVSGWLB? J:K TX..I,WHVLYINDV'OSXDDVFBHJIR B:HFF.RT
1048534. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,0,1,1,0 } -> ,,H?:V':'HWH.SHXH,NCXKJYZB'ZHPJ?LDKO ,?X'PPL:NKYIHQWGQJTCENLNGT.GXJMMWFVN
1048535. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,0,1,1,1 } -> HO GA::TZ:VMFXZXNOJFRIJ:X'E.AH?Q.PO IILXZM:AGGI:,TUPNSZTMJN:RWJHPDX WUHDO
1048536. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,0,0,0 } -> X'.IABTWESOQIWKW?DVFYDFG HJ?JRAQI,,IBV?WE,KP ?DGIJ PORS?.BXAA.OZDYMQPJ?.?
1048537. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,0,0,1 } -> GQLVI TSKPWPKV:IQRE,E'ECHKMONPIJIZSUNXJIKHPBJKGCAIANRC? EMEXLDTGJWDBJNGNH
1048538. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,0,1,0 } -> VCD WIPHBPH?HC?TJL S:XMEWP:CNOJ: OCUVYKTBHOHJULEHQELGGXATWV:. ?AJC?IZUCVA
1048539. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,0,1,1 } -> LESIWKLQTF:CDHOPJ:,LPKO?RD?VWHHY,YU.YZYPTFN:AEL??VDXJAKXIP'IRS.E'TR?QPPEG
1048540. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,1,0,0 } -> DOOERPM'BEPMYE 'RLUZI'.FESIHPEOWODP?XOTXBEZVV?:FBGYH.TFUFJA:QDK'NDTVVXHVI
1048541. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,1,0,1 } -> FKGC,SWODYUPEG.IZONZ,MX'CNMEZBDEFWKV MNLDQ,Y'LY'O?KMFD ADNLPXUIRK :X'BZ,K
1048542. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,1,1,0 } -> ,SGLSZ::BQRXVDHXHCD'I?IYQ,DIH'NAELISBO'XBQDC.QJYGA?VWVUM:FF' GX:IATCN ISN
1048543. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,0,1,1,1,1,1 } -> HGBEQN?TQLVYTMZXN'AZ MK:WWEHS:XQUIEV,ILXQT.EWFI:PEUP.G'YNZU'RWBM,:XDGUPAO
1048544. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,0,0,0 } -> TB..QMYSDRQY,SN'':'GSRGR :I.XGHWDPIKPCY'DBJGJHERDAJHUXFVFBCOWO'.EXVGJA G'
1048545. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,0,0,1 } -> :TLCOPNMODPN:AVOJRD?MH?LVC.'ZR:ILRH,VO.FO?WZDK'LJOU,IUIMMV,R.,FNMKWZDFFWW
1048546. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,0,1,0 } -> PYHFMZRL'HGIND?:GOMU,.FHZKFZ.R'TLLXEFNHP'XTRW'FHCJPASULEKUDJPP VBKZRGFEVA
1048547. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,0,1,1 } -> EFP,C:I?XWUWF.'YCNJFRLJQZLNBC'LPTX.HIXIYXGLMASHQUUFJLWZU ZECPUSETLRLABHMK
1048548. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,1,0,0 } -> SMGFPDDYC?ZQEPUW T?KU.GVL?ARFUKWCOXD.MAWCDH'X,FVC.TF,NW,ZJXWSLNFBOG'XSEOY
1048549. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,1,0,1 } -> WMU YONMAYAEYEVSFPU,CWI ZHHC G'CE,Y:PLCSAALL.IJ GN:OKGYIM.Q?KL KNHOM.PGKX
1048550. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,1,1,0 } -> P CLKPWMUXMSNTPHBD?U,'S BCWJJTK?AOPQPLMAUP.RYZR CCJAAEKYKGU VGB,HPQSYRU,O
1048551. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,0,1,1,1 } ->  LKYWY:TT?LWFOZXF?PXROKPU.MJQ'MURST?,.YQTDVYASHPPWN HUK:EQT:PW.I.EQXQ YIO
1048552. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,0,0,0 } -> X.EODARGJMBYKRHS:XEFI'.ZJVZVBSSZGLILXO :J:YUGH:ZG:,QM?C'FBPUSD'.F?VUGMASI
1048553. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,0,0,1 } -> LYL'IESJNT'NMUKHW'DNIOM.NOL:JWH AXRARXSFN?PIKKO.C?SYRS?DM.H XADN IWHK CWC
1048554. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,0,1,0 } -> PY.XA'SLGZYJTA::GOZI:HEHWINIH'RD NKSRIKPGJG ZUFHHX.ASG.Q'ULMXPLXIYNAZAB'A
1048555. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,0,1,1 } -> EFCAW,H?QMDCTZ.YCVX?FLJQZGN.WYI:ZJMZ:.HYQ::WE IQ?O'J?W.UFQWYTU'E:.XVUB?DK
1048556. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,1,0,0 } -> XWTWEW.RLJZQUAS?.OOL: NBNTR?? PZ RPCTALWLRHEV,NB SYQ'PFTZJKMWZOFAJGEV'XRU
1048557. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,1,0,1 } -> OBUR:WHFLSWDYC,LR:UAWQX'K RYTGKJNYJKDHFELCIH.IZ'KTJ.TAL MFC MAAKEJOI.V.BB
1048558. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,1,1,0 } -> PPTRULTMNR  PQQHBLBI:KP X?.YLZFHMMCGD,NANB.XXUS HAG QPDDU:UG?GZTCZGYXEFTO
1048559. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,0,1,1,1,1 } ->  LX,WX:T:NLIBX,XFDBNFKJPXM.VUX??'YG M.YQ:VD:QRHP.DN XANPFAOKTWB PNC?A M O
1048560. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,0,0,0 } -> ,ON.DCDYCLHTOUPJ LGSQ.OS'TXJBAF.N:J.ZMUCCLMATNMSNDKV'JVR,AI:EXYROU?ATSIBP
1048561. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,0,0,1 } -> :KFJ'ON EY,UMBI.,STSCMLH'C'WLB?CKQKWHZ'.EQUVZMOHEBL,WQML W?JJJAKKD:VZ'ZBT
1048562. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,0,1,0 } -> ZQWL,BFDZZEUYEI?JG?AY,BI'YDZJT,EDE,OBKHUZJEL:MBIJBBUCEKYIBFTBREYGQQM:WP.D
1048563. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,0,1,1 } -> AOIGQ'L:Z:.ED'ZXBMCVTIZYX.EJC,Y?'BLBOILXZMUYQAYY'EDBNCZPIKGU QO QGXXQBYIB
1048564. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,1,0,0 } -> :E.FECHSDRJX,GOV,:VQUR'WUUPD?BA,HRSSTCYVDBKKBN?WH, ZKHCZL ,'VKBSIRMJR'QNW
1048565. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,1,0,1 } -> :T'KOPBA RBZSW'VIIW?MKUEPH?M.PMIJFSRFZKV RNB .TENGD,YAMHI?'RNY WISDB VKZR
1048566. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,1,1,0 } -> .X,F:B.QSBNRZU:PKHVSNIKUUHU ?R'YLGSWDHIPSBBFY'JUJC :QS'?KMWV?PHSKZHGIGS.A
1048567. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,0,1,1,1 } -> HLZKWZ?UUNNYB?OPNTR.FKKQPM?FE,::,,VPMZYPUVFMQVHQYGLPXQO?NYV,TSBAXNALAD:HG
1048568. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,0,0,0 } -> ZLFWUP:R  WUOGB,.OOR,TSKE,XLZ TXJXCWPGAZ  SVVNQKJAYTYPFT,II'EOZRKP?WVYIV.
1048569. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,0,0,1 } -> BBFH'R:'DYNT:BQEWYTQSMPOAJ'U?BXCJYKUXZ, DAZH.MSODBXDDQIL '?HZUAKJD:HN'.BK
1048570. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,0,1,0 } -> ZYWLQZEDNR,?NEI?JGQCYK IQ,LYJ.KQEM,MB,JUNBVX?DAIKB?TSVUM,DN:HRADFYGY?EV.D
1048571. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,1,0,1 } -> AGIEQXM:,:FQV'ZXBECTDIZYWVEHS,:?.JL 'ILX,UVEUTYY.E:B.C.PCBGW QSIPWADEB:IB
1048572. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,1,1,0 } -> I:WODBDSGOCYKTAVXE'.'HWC XPBFSG,OOZ?.IAPG'BNBNTCON RJRS?LH,WWPBSNWMNB':.A
1048573. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,1,0,1 } -> LY'IOQBCAZFZCWO XDW.:KQSFD?ONPIIKNSPVZ, ARCIK.PSO'IYBAIHIT'P.S WHSDH,VOZG
1048574. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,1,1,0 } -> .X. UI?QGJJ. U:PK V,'HIUWPUC?HCMMOSUTIKPGBNIZUJUKSE?ABQH'U.YVPXQJJEIZTU.A
1048575. key 1 = { 1,1,1,1,1,1,1,1,1,1 } key 2 = { 1,1,1,1,1,1,1,1,1,1 } -> HDZIW,?UT.N'R?OPN?R?VKKQRE?DU,Y:ZSVR:ZYPTFFIAWHQXWLPHQK?MQVYTSNAYVAHQDYHG
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fter producing all of the possiblities, one stood out in english. This is what we found:

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22979. key 1 = { 1,1,1,0,0,0,0,1,0,1 } key 2 = { 0,1,0,1,1,0,0,0,1,1 } -> THERE ARE NO SECRETS BETTER KEPT THAN THE SECRETS THAT EVERYBODY GUESSES.
```

JILD SUCCESSFUL (total time: 4 minutes 48 seconds)