**第一題：**

|  |  |  |
| --- | --- | --- |
|  | 輸入 | 輸出 |
| 1 | hcjhCJKHKhcHChCHKCHCYUGCJ  h | 3 4 2 2 2 2 3 |
| 2 | cksSCjslklsLHCHSLclLCHshl  S | 1 3 4 5 7 |
| 3 | hcjhCJKHKhcHChCHKCHCYUGCJ  c | 3 6 2 2 3 2 4 |
| 4 | YOCHXcemfxCmNXcshdlkdmXCexg  c | 3 5 4 9 |

**第二題：**

|  |  |  |
| --- | --- | --- |
|  | 輸入 | 輸出 |
| 1 | 5  FDE  ABCD  EPLUW  UCKMPOU  OYREAWD | ABCD  FDE  EPLUW  UCKMPOU  OYREAWD |
| 2 | 6  FDE  ABCD  EPLUW  QICL  UCKMPOU  OYREAWQ | ABCD  FDE  EPLUW  UCKMPOU  OYREAWQ  QICL |
| 3 | 6  CPZ  ZOJKM  FDE  EPLUW  QICL  WYREARQ | FDE  EPLUW  WYREARQ  QICL  CPZ  ZOJKM |
| 4 | 4  ABCD  DEFG  FAKSHNQP  KHZQP | ABCD  DEFG  FAKSHNQP  KHCQP |

**第三題：**

|  |  |  |
| --- | --- | --- |
|  | 輸入 | 輸出 |
| 1 | 2  6  12 | 4 4 4 4  32 32 32 32 |
| 2 | 2  5  19 | 0  0 |
| 3 | 2  12  14 | 32 32 32 32  64 64 64 64 |
| 4 | 5  5  6  12  14  18 | 0  4 4 4 4  32 32 32 32  64 64 64 64  256 256 256 256 |

**第四題：**

|  |  |  |
| --- | --- | --- |
|  | 輸入 | 輸出 |
| 1 | 10  0 1  0 1  1 4  1 4  2 4  3 4  3 2  4 4  5 5  8 5 | **6** |
| 2 | 25  0 1  0 2  0 2  1 2  3 2  5 2  8 3  9 3  9 1  9 3  9 1  10 3  11 2  12 3  13 1  13 2  13 1  13 2  15 3  15 1  17 2  18 1  18 1  19 1  20 1 | **15** |
| 3 | 100  7 5  9 3  22 4  47 4  48 5  72 3  92 4  109 1  112 5  137 2  139 2  146 4  162 3  166 4  167 5  220 4  251 4  262 1  275 2  275 2  285 2  290 1  292 3  292 2  317 2  347 2  350 2  365 4  380 5  383 5  409 2  424 2  455 2  458 1  460 5  466 4  478 2  498 1  499 1  504 2  508 2  518 3  519 1  530 4  532 5  536 4  540 2  557 2  558 4  565 4  574 5  588 4  609 3  616 1  620 5  627 3  631 1  635 3  660 3  672 1  676 4  679 5  702 5  713 2  726 2  730 2  733 3  736 3  761 4  781 2  783 4  795 4  797 3  816 2  831 3  835 3  845 3  857 2  862 4  865 2  866 2  867 2  885 4  890 2  898 2  901 4  903 1  906 3  919 2  934 1  942 3  952 2  955 5  965 4  977 3  980 4  982 5  986 4  991 5  992 3 | 2 |
| 4 | 100  2 8  20 8  27 8  30 10  31 6  35 2  43 5  53 1  75 5  82 6  82 1  96 1  104 1  132 7  134 4  141 3  149 10  174 5  193 1  198 4  206 8  211 9  214 5  216 2  224 2  250 1  271 8  312 4  322 8  328 3  328 9  338 2  365 6  367 6  369 7  385 3  388 6  390 1  394 7  395 9  399 4  405 7  406 10  415 6  416 3  419 2  432 3  472 8  486 9  498 5  503 8  519 5  522 8  529 10  548 5  552 8  562 5  580 8  583 10  589 7  598 9  600 3  609 1  629 7  634 3  644 6  666 8  696 4  699 6  711 2  715 10  730 6  736 10  736 2  742 6  744 10  754 8  757 5  786 10  787 9  800 8  801 3  810 5  829 4  834 10  847 5  859 2  867 10  871 8  872 6  877 5  886 5  909 5  917 2  926 5  930 7  948 2  953 2  973 2  988 1 | 4 |

**第五題：**

|  |  |  |
| --- | --- | --- |
|  | 輸入 | 輸出 |
| 1 | 2  daedmentlelnotleas  6  tales  no  men  tell  tlel  dead  mseriylveoscpmonay  3  loves  misery  company | 1  misery loves company |
| 2 | 2  goodceusonlnveercmoesasims  5  amiss  comes  good  counsel  always  pcctiarewahtyoupcareh  4  you  practice  preach  what | -1  practice what you preach |
| 3 | 1  gtaehryourobduseswilhemay  5  you  while  may  rosebuds  gather | gather you rosebuds while may |
| 4 | 1  erveymanhashisttsae  5  man  has  every  taste  his | every man has his taste |

**第六題：**

|  |  |  |
| --- | --- | --- |
|  | 輸入 | 輸出 |
| 1 | 2  AAA  AAAAAAAAAA  ABC  CONFAPONFNONANF | 8  -1 |
| 2 | 10  SSS  SSSSSSESSQSSYFSSSSSOSSSSSSSSSSP  NHN  HNNHPNHNINHNHNNHBNHHNXNHNDHNHNNHNKNHNJNHNNHN  VZV  ZVKUFZVVZVQVZSVZVZVZVVZXRUZVVZVZV  CXC  CXCFCXIXCXHXXC  III  IIIIIIIIIIIIIIIIIII  XNX  ZOPA  UUU  UUUUUUULQUUUUIUUUUUUUUUUUUNUUUUULQPUUAIUU  NNN  NNXNNTNNNNNNNN  UUU  UUUUYUUGRUUPJSUUUUU  DDD  DDPODDVDDDDADDDDDDDDDDDDDDDDDUDDQJDDDDDDDDDDD | 15  9  6  1  17  0  20  6  5  26 |
| 3 | 3  PLP  PLPOLPLHJKMKIJHPLPHLP  AKAA  AKJIAKEAKEKFOAKAAKAK  LKL  BEGINLKLLKLKLKELD | 2  -1  3 |
| 4 | 50  PBP  PBUPBPBPBPPBPPPBPMRBPZPBQAPBPBJPBPPBPBPPBBPBGPIPBZPBPBRQBPBPPBBPBELPBPDPBVLWV  WWW  WWWWWWWWWWWWYWWPWWWWWWWWEWWWWWFWWGOYWWXTPMWWWWWZWWVRWWWWWWZWWHTWWWXWWEWWWWWJ  JHJ  JHIHJJHJHZIJHEJHJYJHUJBJHJJHMJHJJJHGJHJHBJHJJHJHJIJHJQBYHJHJ  APA  GAPPAPAAPAAPCAPLPAAPAPAAPAPAAPAPAAPJAPV  VVV  VVVHVVPRFVVVVPVVVEVVLFVVPVVVVVVVVVD  MMM  MMMDUMMMMDMMMPMMVMMMM  OUO  UOXUOOUOUOOUUOOUOOUOOUHCOUUOOUOUOHOUNVOUOOUOOUOOUOYOUSOUOUMOUPOUOOUOUOUGOUOUO  HJH  HJZVHJHHJHJHHJIJHVOHJJHJHJHHJHJHPUHJHHJMHJHHJBHJTJHCHJHHJUUKHJHHJJHN  MAM  MAMAMAMXMAFMAR  NEN  NEQSNEWCENNENENTENNEN  YYY  YYYYYYYYYYYYYHYYBYYYYYYYYYYYYSYYKYYUYYYYEYYUCYYBYYYYY  PXP  PXEXPPXPXPIHPXPXPPXLPXPXPGOXPXPPXPXPPXEXPXPPXWPXPXPXPGDPXPXPXPPXPXHPSPXVPXP  HQH  HQCPKHQHQXEQHHQQHHQHHQUHQHHQYHQHYHQHHQ  LRL  LRYLRQWLRIRLLRKRLHLRLYSLRLLRLLRNKLRLRLLRMLRLLRGLRL  RKR  RKRRKERKRRKKRRKRRKRUKRKRKYRKUKRLRKRRKDRKRTQRKZRKKRRKRKKRRKRRKRKRRKRKRRKRQRKBRKBARRKRVKRRKR  AQA  AQKQAAQAQAQAAQAAQAQUAQAOQAAQEAQFQAAQAQAAQAQADAQAAQMQAAQAAQUEQAAQAAQLAQN  BBB  BBBBBBBBBBBBBTBBBBBMBBBBBBB  KKK  RKKKKKKKKKZKKVCPKKACKKCKKKKKKKKDKKCKKKKKKKRKKRKKKKHKKKKKKKKKJKKKJKKCKKKNLKKVIMBKKSOEX  YWY  YWYWGNWYYWYYWWYVYWEWYYWWSYWYWFFWYCYWYWYWYYWMCLYWYYWYYWYWWYWYWYLWYWQSTAWYYWYYYWY  DED  DEDDEEDEDDEDEWEDXWIDEDEDEDSCDEDDDEAEDEDKDEXEDSDEDELDEDEDDEEDE  KAK  AKKAKKAKAKAKAKJGKAKAKKAZKANEAKAKKAKWBKAK  EKE  EKYEKMKEEKKEWEKOKEFQEKEKEEKUKEUQEKEYLEKBEKEKEEKKEEKEKEEKUEKKEKEEKEKECEKEEKCOKEKEEKHEKUUEKQB  AXA  AXXAAXAXAXAXAMXAXAXAXKXAAXAXAXABAXAYAXU  BBB  BBBBBBBBBBBBXBBBBBBBBBBBBBBBBQBBWBBDLBBBBBBBBBGBBBJBBBBWBBBBBBBBBBBBBB  EAE  JAEEAACEAPEAEEAMVEAEEAEBAEAENAEDANAEEAEGEA  BOB  GBORLCIBORZBOBOBBOB  QHQ  DQHCQHBQHBHQQHAQHG  XYX  RYXWLYXXXYXKXYYXXYSVXYGXYXQYXLXYXXYXYXFYXXYXXYXZXYXXYRVXYXJYXXYXYXXYKQGJYXXYMBXYLXYMXYX  SZS  ZSGUQZSQZSGKESZSZSNSZJSZSGZSWZSDFEHSGESZSZSZSSZSZSZNSZSZSVSZXSZSSZSZSSZR  CYC  CYCCYCFCYHCYCH  ZDZ  ZDZZDZDCZDZZDZZDTZDBZDDZZDZDZZDZZDZBZDZKZDZZDPDZ  VVV  LNVVVVVVVVVVVVVVMZVVVVVAEVVVSVVAVVPJTWVVOVVCVVVJVVVVSVVBDVVVVVVKVVP  CTC  CTOCTCTCZCTCTCCTGCTCCTCCTVCTFCTCCTCVDCTNCTTCBCTCNCTUCTJTCCTCCTCTCCTUCTDCTCCTCPCTCCTCMCTC  MNM  MNNMDNMMNMNMEMNMNMAMNMDNM  RKR  XYRKFRKVRKWRKKRKRKHRKOFGKRSCRKPKRKRRKPTRKRKMRKRRKJRKBHWKRRKKRRRKRKRRKCRKRYKRRKMRKXRKC  FLF  FLFSFLFLFFLFLFFLFLFFLLFFLLFLFLFLFFLIFLELFPTZFLFLFMNFLFFL  ZHZ  ZHBZHZRIZHZIZHZDKZHZHZZHSFHZZHTHZZHZHZMZHZZHZZHGZHZ  XDX  DXXDXXDXDXDXDXXDJBXDFJXDKXDXDOOXDMDIXDRXDXDXXDDAXDXDXDXX  QAQ  QAQAQAQAQQAQOQAQAQQAQAQTAQAQQAQQAQAQQAOQAXQALQACAZQALQA  VQV  QVVQVOYVQNVQUQVAOVQAVQVQVWWVQVVQHVVQVVQIVQVVQVLVQVQVVQXVQUVQVVQIVQRQVVQGVQUQVVQVEVQC  QEQ  EQEQWQEKEQQEQEQZQEQEVTQEQQEJQEEQIQEOEQEQBEQ  DDD  DDJADDDDDTDDDDDDRDDJPDDVDDDDDQDDDDDDDDDDDDPDDBDDDDDDDQRDDWDDAXDDKDDIDDDDQDDDJLDDHSKDD  MEM  EMMEM  LXL  LXQLXDLXLLXLXHLXLLXGQ  TJT  TJRJTTJTNTJTTJDTJDTJSTJJSFTJTJPTJ  JGJ  ZJGZJGJJGJJGJJGIJGJPHGJGFGJGJRJGJCJGOGJGJUNJGLJGPGJYGJYFYGJJGCJGJGJJGPJGJGJJGJGJ  WWW  WWIWWXWWWWWWWWWWWWBWWWWWWWCWWRWWWSVHWWVSWWFWWWWWWWZWWWWWWWWWQ  UUU  AUUUUUUUUUUUUULUUUUUUUUUUUUUUUUUUYUMUUUORUUUUUUUUUUUUUUUTUUUUUUUUKUUUFCUUUUUUU  SYS  YSSYSSYKSYSYSSYSYVZYSSYSESYKRSYJSYSGSYSCWSYYSFVSYDGSYJSYS  EWE  EWYVJEWEWEWERWEHEWQEWDEWEWEEW | 12  30  10  8  11  6  16  11  3  3  26  18  5  7  16  13  19  29  13  11  10  12  10  46  5  3  0  12  13  3  10  23  17  5  7  13  10  11  13  11  6  28  1  3  3  13  28  53  8  5 |