

```
java hillcipher inkey1.txt infile1.txt
```

Key matrix:

```
2 5
3 7
```

Plaintext:

abcdefghijklmnopqrstuvwxy

Ciphertext:

Fhtbhvvpjjxdlxzrnlbfpzdtrn

```
java hillcipher inkey1.txt infile2.txt
```

Key matrix:

```
2 5
3 7
```

Plaintext:

abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxyab
cdefghijklmnopqrstuvwxyz

Ciphertext:

fhtbhvvpjjxdlxzrnlbfpzdtrnfhtbhvvpjjxdlxzrnlbfpzdtrnfhtbhvvpjjxdlxzrnlbfpzdtrnfh
tbhvvpjjxdlxzrnlbfpzdtrn

```
java hillcipher inkey1.txt infile3.txt
```

Key matrix:

```
2 5
3 7
```

Plaintext:

artofcomputerprogrammingvolumefasciclethemmixarisccomputerforthenewmillenniumthi
smultivolumeworkontheanalysisofalgorithmshaslongbeenrecognizedasthedefinitivedes

cription of classical computer science. The three complete volumes published to date already comprise a unique and invaluable resource in programming theory and practice. Countless readers have spoken about the profound personal influence of Knuth's writing. Scientists have marvelled at the beauty and elegance of his analysis while practicing programmers have successfully applied his cookbook solutions to their day-to-day problems. All have admired Knuth for the breadth, clarity, accuracy and good humor found in his books. To begin the fourth and last volume of the set and to update parts of the existing three, Knuth has created a series of small books called fascicles which will be published at regular intervals. Each fascicle will encompass a section or more of wholly new or revised material. Ultimately, the content of these fascicles will be rolled up into the comprehensive final version of each volume and the enormous undertaking that began in will become complete.

Ciphertext:

hpezudkwadghfaatthigmoedifsrsmkpuqamqjvcqsmourwduqwavlflpbcjzcixupautxqjnamipncz
sirhajifsrsmkigrpdvcimanmtygckwpaxjfhwbztzmwobedwfvzcbwazflrxhmwvcxhhvdlhbrpxhui
lvnzaipdbzhfmwygeggvkwadghuvskvzyivczpvkcowavljgghifsrsmhdtpkltzxhezggjghdzcbspvgi
kwlicuimbvsgiknnunbedzoifcpbuiyasnwqxoatthigmoedvcagylndkizvjamsayarqqjwycbpvpb
tzbruiwnoganuxflvcfnatcjbvdkpbcwanklzwsvzyibzhrflarzdhdlyouqkarqcuybovknykjql
xhrdvcentimflwupillmcnnyibzczkcanmtygqaczqjlkoajskedliggizgqpbztzbruiywyiwygzzgwu
buklxhczuqkzlkugafpflismjezvcwqxuqmezgjtvtfcqskczgovknpvmocbebwvccjzcixjsimxm
yjhwdcrkoagizusnnkzukpgwojfcjbvunjkcuxaibfhxmcdlvchvyazcovpiwhghjqfpwouibzvcui
zpnxmyatordfnhpybbzvccoivbldldvvcvcohrflxsmwlvimghgjeewduibzsidzboukgaegzgxhkpuq
amqjqacznzdgsgwzfwadfccuixxmcbicwhwdrqpbqlidimndkpuqamqjgszgvzwavlmwkceevjisshqfjf
agqngpzgjhokjffdcuxhykghwddzrhajykgmtvcapdghrbzvcuihvmwskhfuiqszgwzfatgzxhljdl
ezvcsakwlirjvzygknytanxypbygpcdwkpmfwpwoimpivccoshqfyagmpipbmfiiedvcrdwfmsorgl
txbosakwhszptr

```
java hillcipher inkey2.txt infile1.txt
```

Key matrix:

5	7	10
3	9	12
4	2	11

Plaintext:

abcdefghijklmnopqrstuvwxyz

Ciphertext:

bhybxdvwrpvmfjtdthxsvrrfbj

```
java hillcipher inkey2.txt infile2.txt
```

Key matrix:

```
5  7 10
3  9 12
4  2 11
```

Plaintext:

abcdefghijklmnopqrstuvwxyzabcdefghijklmnopqrstuvwxyzab
cdefghijklmnopqrstuvwxyz

Ciphertext:

bhy pbx dvr p v f j u t d t h x s v r r j l q x f p l z o z t n n n m b h l p b k d v j r p i f j h t d g h x f v r e j l d x f c l z b z t a n n z b h
y p b x d v r p v f j u t d t h x s v r r f b j

```
java hillcipher inkey2.txt infile3.txt
```

Key matrix:

```
5  7 10
3  9 12
4  2 11
```

Plaintext:

art of computer programming volume fascicle the mixar is computer for the new millennium this
multivolume work on the analysis of algorithms has long been recognized as the definitive de-
scription of classical computer science the three complete volumes published to date already com-
prise a unique and invaluable resource in programming theory and practice countless readers
have spoken about the profound personal influence of Knuth's writing scientists have marvel-
led at the beauty and elegance of his analysis while practicing programmers have successfully ap-
plied his cookbook solutions to their day-to-day problems all have admired Knuth for the breadth
of clarity accuracy and good humor found in his books to begin the fourth and later volumes of the
set and to update parts of the existing three Knuth has created a series of small books called fasc-
icles which will be published at regular intervals each fascicle will encompass a section or mor-
e of wholly new or revised material ultimately the content of these fascicles will be rolled up in
to the comprehensive final versions of each volume and the enormous undertaking that began in
1968 will be complete

Ciphertext:

xrjvhksslntgwazwovwsajfubjzqisxxkiyunlbbtmuifrpssusslntgaeycubvvioksqygcskkgblx
iykbxrljrmwymddsnxflfktprosmegzhpkjfweeojnivjonbxwwldhuisdvlwnrccmepbxddqxrljdjo
qdxliuvvhkbpikugttssslntgxdwqibukrtzlmocsqsprrlxubjzqisfnkgqkxjackwxdnaohjjyvpe
ssljbwmscvrkyskkgqeunfgsushroqkxoiacojwovwsajfucmenpqrhxmqpnegomcofewmwejywxhr
olnzkqjyyqxzlkitcmewcolricmphrofdehbvqqcbxmmqvdxamycxdcvzbygycwqsuwnzwlznzaqomcyj
bhljnrvrmcdnuwkynlohlwmqvlxinnanxewiytrjjnzwmfeiuixnvjpgxnsyqjjnibdeeycoaqqppzppo

eadusvlxiooipzoikojrmflmrnlnlpmclvlqplhggflhdvfcse lasgdvoxfuntfdxamypphnrvjjyke
xjbetnhksoiabuuirxhiayeamqcdlrikggmqydxuikovnlmgmiilnrytzljvpoeihllbjzqisegzcmew
gdrxhdhmsuonnpjrjegzcmebdurjqljnmocmyxrdnhdsnzirlenrclbiaeyljgfnjleoifxnnvzqeg
isbcwihnojdemoznxggqkxjagudcuordxjfhlbvxdmokmsomcmixxwqkrfrnuqmvbykkkqyviuvxbovj
ennwjtvpbcoglbvyaivnkhlluaxdxzucezrxlpdsqseyeaokukfeosxxkiyudzqqkrymmhxjjbhzfqa
okcmeuqmamilfxsohfxtprrrtaiitfibzcyjttjrmkueqihzbcvfhumkwavfpznvejfuqmmkseslnpo
tvtblisslnlbvbd

```
java hillcipher inkey3.txt infile1.txt
```

Key matrix:

1	3	5	7
3	5	7	1
5	7	1	3
7	1	3	5

Plaintext:

abcdefghijklmnopqrstuvwxyzxx

Ciphertext:

iwsuieiguqusgcgesosqaelrxn

```
java hillcipher inkey3.txt infile2.txt
```

Key matrix:

1	3	5	7
3	5	7	1
5	7	1	3
7	1	3	5

Plaintext:

abcdefghijklmnopqrstuvwxyzabcdefghijklmnopqrstuvwxyz
cdefghijklmnopqrstuvwxyz

Ciphertext:

iwsuieiguqusgcgesosqaeacmqocycakomawaymimkyuywkgiwsuieiguqusgcgesosqaeacmq
ocycakomawaymimkyuywk

```
java hillcipher inkey3.txt infile3.txt
```

Key matrix:

1	3	5	7
3	5	7	1
5	7	1	3
7	1	3	5

Plaintext:

artofcomputerprogrammingvolume fascicle themmixarisc computerforthenewmillenniumthi
smultivolumeworkontheanalysisofalgorithms haslongbeenrecognizedasthedefinitivedes
criptionofclassicalcomputersciencethethreecompletevolumespublishedtodatealreadyc
ompriseauniqueandinvaluable resourceinprogrammingtheoryandpracticecountlessreader
shavespokenabouttheprofoundpersonalinfluenceofknuthswritingsscientistshavemarvel
edatthebeautyandeleganceofhisanalysiswhilepracticingprogrammershavesuccessfullya
pliedhiscookbooksolutionstotheirdaytodayproblemsallhaveadmiredknuthforthebreadt
hclarityaccuracyandgoodhumorfoundinthisbookstobeginthefourthandlater volumesofthes
etandto updatepartsoftheexistingthreeknuthhascreatedaseriesofsmallbookscalledfasc
icleswhichwillbepublishedtregularintervalseachfasciclewillencompassasectionormor
eofwhollyneworevisedmaterialultimatelythecontentofthesefascicleswillberolledupin
tothe comprehensivefinalversionsofeachvolumeandtheenormousundertakingthatbeganinw
illbecompletexxx

Ciphertext:

kyyojfljqwmulzpvlldpnrrfywoixnpzasoglltraikmioascoswekiuwgeahrdxlrnvuekqyyqueggi
xfttmygodnlxlvjpntrvzhpvbfhndlzkwgccyiajdlpesceumykhvbriawjtrrdtblucyssokwdvvd
qgaawawomokisqmithbfftvvigmshjfvckaghrdxuioekkgwaeekdnlxokkysyusysycwquugwcendzh
kqmgemoidpnxtplbfffrrdnttrzhlimmgvtxrhvntlldpnrrfceioycgadvhjddbpmkeqxhnhdlhlsiyw
eguexnvfjlnjqyyujfltaowkxffdjdrnuuwipfpvdrvpouyqeoikmsievtjvouuqcaaqeouqplpfvnjz
quuwprvdbptbgkmovxpdzfbnqugifpzjvbfntnbpjttdbvfvdntnwasmfdrhmwebvxtmkymdrvziwae
pxhlaguokuegzrjbdvpdhrxtaqscmyqkmmwiysuasysiusmumegkqqcvdfbkyqajtlvfppnnnllwacc
qeigsoysasyenldlsoiaqkka lbpteeaslrzbzjfbhrdhxbdvljvpfvzztfnrdzbtxdjvhxpvvhxtjjeiui
wqkikooabbxvmauywqqkkueqkumgcumaciouwukeywiqvpdruuwqptdnhxtjzbvzlaouiweqhplfnxv
tlzhntnbbhvbvxzvphbpbvldlrvhrnzrftdbekeehvddwymkasoghhzfzjtjbtjjoiourdvxfrlxisay
rjhlzxxvdfvryuwyzpxxfnfoysawwmofrnfthdlpdjhfllrzpnjffqiwmzdpwxmcqaoachpplowsk
xhzficgc fjlnhdxfkwyghjvtxzjhnnbflhxjbvlysgikmwexhzldvjnio ssuwcylhrrhtbrndwkso
zbbbicgctrfplznb