

Basic Cryptanalysis



Task

Given a piece of text encoded with a simple monoalphabetic substitution cipher, use basic cryptanalytic techniques to recover the original plain text. You will be provided with a special dictionary file that you can read from *dictionary.lst*. It will consist of one word per line.

Input Format

The input ciphertext will consist of a string of space separated enciphered words from the provided *dictionary.lst* file that is accessible to your code. The dictionary contains technical jargon and may not be entirely representative of English language plain text, so frequency analysis techniques may not be entirely helpful.

Constraints

$1 \leq \text{words in dictionary.lst} \leq 1700$

$1 \leq \text{words in input} \leq 100$

Output Format

Output the decrypted plain text. The output will be a string of space separated words from the provided dictionary. You'll be scored based on how accurately you recover the original text.

Sample Input

```
lhpohe gvjhe ztytwojmmtel lgsfcgver segpsltjyl vftstelc djfl rml catrroel jscvjqjyfo mjlesl lcjmmfqe egvj gsfyhtyq sjfgver csfaotyq  
lfxytyq gjywplesl lxljm dxcel mpyctyq ztytwojmmtelel mfcgv spres mjm psgvty bfml ofle mjlc dtc tygfycfctjy dfsyl zpygvel csfao  
yealqsjpml atyl lgsjql qyfsotelc fseyf ojillel gjzmselltyq wpyhtelc zpltlgl weygel afyher rstnesl aefleo rtyhes mvflet yphe rstnes qojder  
dtwwer lojml mfcgvel reocfl djzder djpygtyq gstmoeafsel reg cpdel qspyqe mflctel csflvtyq vfcl avfghtyq vftsdfool mzer rsjye  
wjjol psol mplvtyq catroee mvfqe lgseey leqzeycer wjseqsjpyrer lmjtoes msjwtoel docl djpyger cjpstlcl goefy gojddesl mjrl qjddoe  
gijy gpdtyql lyftotyq rjayojfr swgl vjle atrqec gjzmfges frfl qotcgver gspzd zftodjzdl lyfsh
```

Sample Output

```
skulker choke minifloppies scratched recursions hairiest boas dps twiddles orthogonal posers stoppage echo cranking roached  
trawling saying confusers sysop bytes punting minifloppieses patch ruder pop urchin zaps lase post bit incantation barns munches  
trawl newsgroups wins scrogs gnarliest arena losses compressing funkiest musics fences wanked drivers weasel dinker phases  
nuke driver globed biffed slops patches deltas bombed bouncing cripplewares dec tubes grunge pasties trashing hats whacking  
hairballs pmed drone fools urls pushing twiddle phage screen segmented foregrounded spoiler profiles blts bounced tourists clean  
clobbers pods gobble con cubings snailing download rfcs hose widget compacter adas glitched crumb mailbombs snark
```