

Problem C — Substitution Cypher

Substitution cyphers are the simplest of cyphers where the letters of one alphabet are substituted for the letters of another alphabet. In one form or another, they've been in use for over 2000 years.

Input:

- a line containing the plaintext alphabet;
- a line containing the substitution alphabet;
- several lines of text;
- a line with the text "End of text!!!".

Output:

- a line containing the substitution alphabet;
- a line containing the plaintext alphabet;
- the converted lines of text.
- a line with the text "End of text!!!".

Please note: All lines will be at most 64 characters, plus a trailing end-of-line character. The **lines** with text "End of text!!!" must not be converted. Pass through all characters not found in the plaintext alphabet.

Sample Input:

```
abcdefghijklmnopqrstuvwxyz
zyxwvutsrqponmlkjihgfedcba
Shar's Birthday:
The birthday is October 6th, but the party will be Saturday,
October 5. It's my 24th birthday and the first one in some
years for which I've been employed. Plus, I have new clothes.
So I have cause to celebrate. More importantly, though,
we've cleaned the house! The address is 506-D Albert Street.
Extra enticement for CS geeks: there are several systems in
the house, and the party is conveniently scheduled for 3 hours
after the second CSC programming contest ends (not to mention,
within easy walking distance)!
```

Sample Output:

```
zyxwvutsrqponmlkjihgfedcba
abcdefghijklmnopqrstuvwxyz
Sszi'h Brigswzb:
Tsv yrigrswzb rh 0xglyvi 6gs, yfg gsv kzigb droo yv Szgfiwzb,
0xglyvi 5. Ig'h nb 24gs yrigrswzb zmw gsv urihg lmv rm hlnv
bvzih uli dsrxs I've yvvm vnkolbv. Pofh, I szez mvd xolgsvh.
Sl I szez xzfzv gl xvovizgv. Mliv rnklizmgob, gslfts,
dv've xovzmvw gsv slfhv! Tsv zwwivvh rh 506-D Aoyvig Sgivvg.
Ecgiz vmgrxvnvmg uli CS tvvph: gsviv ziv hvezizo hbgvnh rm
gsv slfhv, zmw gsv kzigb rh xlmevmrmvgob hxsvfow uli 3 slfih
zugvi gsv hvxlmw CSC kiltiznnrmt xlmgvhg vmwh (mlg gl nvmgrlm,
drgsrn vzhb dzoprmt wrhgzmzv)!
```