

Kawealeak

Time Limit : 1s

Kawealeak organization just released secret documents from Makrovia country. These documents contain binary codes. Kawealeak had received an information that every character are mapped to binary codes with the same length (length is 7), lower and upper case differ by most significant bit. Kawealeak also successfully decrypt some codes into texts. As a new member of Kawealeak, you want to show your competence by creating some code that can easily translate binary codes into human readable text.

Input

The input consists of several lines of string. Length of each line doesn't exceed from 1000. Every line consists of 0 or 1 character, and the number of characters always divisible by 7. Input terminates until EOF.

Output

Translate binary codes into human readable text. Empty lines must output like the input.

Decrypted Sample

Input

```
001001001100000110000101000000000000010010000010100101000011001

010100111001010011001000000011111000000110001101100011000100010000000011101000010011011000001110101000011000000011001000110000000
1110000000011001010010111001000011001010010000000011011110000100000001001100000010111000010011001000000010000100110011000011110
```

Output

```
Good Game

the quick brown fox jumps over the lazy duck
Output is Case Sensitive
```