



UVA10222

題目

Once in BUET, an old professor had gone completely mad. He started talking with some peculiar words. Nobody could realize his speech and lectures. Finally the BUET authority fall in great trouble. There was no way left to keep that man working in university. Suddenly a student (definitely he was a registered author at UVA ACM Chapter and hold a good rank on 24 hour-Online Judge) created a program that was able to decode that professor's speech. After his invention, everyone got comfort again and that old teacher started his everyday works as before.

So, if you ever visit BUET and see a teacher talking with a microphone, which is connected to a IBM computer equipped with a voice recognition software and students are taking their lecture from the computer screen, don't get thundered! Because now your job is to write the same program which can decode that mad teacher's speech!

BUET大學有一位老教授就發瘋了。他開始說一些奇怪的話。沒有人能夠聽得懂他的上課內容。

最終，BUET大學陷入了難題。無法讓這位老教授繼續在大學教書。

突然有一位學生(肯定是UVA ACM章節的註冊作者，並且在online judge排名很高)創造了一個可以將教授說的話解碼的程式。

在此之後，老教授又繼續正常的教書，每個人都感到很開心。

因此，如果你有機會參訪BUET大學，並且看到一位老師正在用裝有語音辨識麥克風講話，你可別嚇到。

因為現在你的工作就是寫相同的程式來解碼瘋狂老教授的語言。



輸入與輸出

Input : The input file will contain only one test case i.e. the encoded message. The test case consists of one or more words.

輸入：輸入僅包含一筆測試資料，也就是編碼後的訊息。
這筆測試資料包含一個或多個單字。

Output : For the given test case, print a line containing the decoded words. However, it is not so hard task to replace each letter or punctuation symbol by the two immediately to its left alphabet on your standard keyboard.

輸出：根據測試資料，輸出解碼後的單字。把每個字母或符號以鍵盤上它左邊第二個鍵的符號來取代就行了。

範例測資

Input :

k[r dyt l[o

p '[nt]y[jyd..

Output :

how are you

i love program

程式碼說明

Step 1：輸入測資

```
11 int main() {  
12     string in;  
13     while (getline(cin, in)) {
```

已宣告變數

in

註解

編碼後的訊息

程式碼說明

Step 2：判斷每個字是否為空格

14
15
16
17
18
19
20

```
for(char i:in){  
    if(i=='  
        cout<<" ";  
    else  
        cout<<out(i);  
}  
cout<<endl;
```

已宣告變數

in

註解

編碼後的訊息

程式碼說明

Step 3：對輸入的字元解碼

```
4 char out(char in){  
5     string dec="`1234567890-=qwertyuiop[]asdfghjkl;'zxcvbnm,./";  
6     for(int i=0;i<dec.size();i++){  
7         if(dec[i]==in)  
8             return dec[i-2];  
9     }  
10 }
```

已宣告變數

in

dec

註解

編碼後的訊息

鍵盤字母

完整程式碼

```
1 #include<iostream>
2 #include<string>
3 using namespace std;
4 char out(char in){
5     string dec="`1234567890-=qwertyuiop[]asdfghjkl;'zxcvbnm,./";
6     for(int i=0;i<dec.size();i++){
7         if(dec[i]==in)
8             return dec[i-2];
9     }
10 }
11 int main(){
12     string in;
13     while(getline(cin,in)){
14         for(char i:in){
15             if(i==' ')
16                 cout<<" ";
17             else
18                 cout<<out(i);
19         }
20         cout<<endl;
21     }
22 }
```




資料來源

英文題目：

<https://vjudge.net/problem/UVA-10222>

中文翻譯：

<https://zerojudge.tw/ShowProblem?problemid=e578>



Thanks!

