



Problem E

¡Pura Vida!

Time limit: 5 seconds

San José, Costa Rica

You've tried to send a postcard home to your family during your trip to Costa Rica, but the Horrible Seaborne Postal Company (HSPC) has misplaced it! You've managed to capture a blurry picture of the postcards in the lost-and-found—you can't make out all the letters, but you know that yours said "¡Pura Vida!" on the front.

After recording the letters from the image (and writing down a `*` where you weren't sure what the letter was), you've set out to find your postcard.

Given the partially-blurred sequence of letters in the image, where is the first location that the string PURAVIDA could be?

Input

The input consists of a single string s ($1 \leq |s| \leq 100$) consisting only of the upper case Latin letters A-Z and asterisks `*`.

Output

Print the first index in s (starting from 1) where the string PURAVIDA could be. If no such index exists, print `-1`.

Sample Input 1	Sample Output 1
P*RAV*DAPURAVIDA	1
Sample Input 2	Sample Output 2
ABCDEFGH IJKLM	-1
Sample Input 3	Sample Output 3
BIGDAYHSPURAVIDCJPPURAVIDAABC	18