# DWITE '11 R1 #5 - Tattarrattat

**Time limit:** 1.0s **Memory limit:** 64M

### DWITE, October 2011, Problem 5

A palindrome is a word that is the same backwards as it is forwards (e.g. `tattarrattat`). Even though most words aren't palindromes, you can always remove letters from the word to make it a palindrome (remember that all words of length $0$ or $1$ are palindromes). For example, `farmer` is not a palindrome, but removing a few letters yields `rer`, which is a palindrome.

Your task is to determine the length of the longest palindrome you can get from a word by removing zero or more letters.

The input will contain 5 test cases, each a line with a string $S$ consisting of no more than 255 alphanumeric characters (a-z, A-Z, 0-9). There are no spaces.

For each test case, print one line, each a number — the length of the longest palindrome you can get by removing zero or more letters from the corresponding string.

## Sample Input

```
tattarrattat
sounds
cool
```

## Sample Output

```
12
3
2
```

Problem Resource: DWITE