
Parentheses

P35352_en

Olimpiada Informática Española — Final 2007 (2007)

Your task is to write a program that determines, for each given word, if it is correctly parenthesized or not. Here, a word is a non empty sequence of '(', ')', '[', and ']' without intermediate spaces.

For instance, these are some words correctly parenthesized:

`() [] () [] [()] ((())) () [] ([]) ([[()] (()))`

And these are some words incorrectly parenthesized:

`) []) ([(]) [(()) () [] []) ([[[] ()] ((`

Input

The input consists of a series of words of between 1 and 1000 characters, one per line.

Output

For each given word, your program must print "correct" or "incorrect" as required.

Scoring

- **TestA:**

30 Points

Some test cases will include words like the ones in the instance 1, that is, only with the characters ' (' y ') ' .

- **TestB:**

70 Points

Other test cases will include words with the characters ' (, ') ' , ' [' y '] ' .

Sample input 1

```
()
(
() ()
((()))
) (
(( ) ( ))
```

Sample output 1

```
correct
incorrect
correct
correct
incorrect
incorrect
```

Sample input 2

```
[]
() []
[()]
([[ ] () ] ( ( ))
[]
([[ ] () ] ( (
```

Sample output 2

```
correct
correct
correct
correct
incorrect
incorrect
```

Problem information

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