

Parentheses Balance

You are given a string consisting of parentheses `()` and `[]`. A string of this type is said to be *correct*:

- (a) if it is the empty string
- (b) if A and B are correct, AB is correct,
- (c) if A is correct, (A) and [A] is correct.

Write a program that takes a sequence of strings of this type and check their correctness. Your program can assume that the maximum string length is 128.

Input

The file contains a positive integer n and a sequence of n strings of parentheses `()` and `[]`, one string a line.

Output

A sequence of `Yes` or `No` on the output file.

Sample Input

```
3
([])
(( [ () ] ))
( [ () [] () ] ) ()
```

Sample Output

```
Yes
No
Yes
```