# Lyndon's Golf Contest 1 P8 - Beautiful Brackets

**Time limit:** 2.0s **Memory limit:** 256M

Everyone knows that bracket matching problems are the best types of problems. Today, you will be examining some especially *beautiful* brackets!

A bracket sequence is a string consisting solely of `(`s and `)`s. A *beautiful* bracket sequence is a bracket sequence that contains an equal number of `(`s and `)`s, and whose last occurrence of `(` comes before the first occurrence of `)`. For example, `()`, `(())`, and `((((((()))))))` are *beautiful*, whereas `())`, `((()))`, and `()()()` are not.

Given a bracket sequence, your task is to determine whether it is *beautiful* or not.

**Note: You may only submit to this problem in C/C++.**

## Input Specification

The first line of input contains a single string $s$ $(1 \leq |s| \leq 100)$.

## Output Specification

Output `YES` if $s$ is a *beautiful* bracket sequence, and `NO` otherwise.

## Scoring

Your score will be computed based on the **length of your source code**, the shorter the better. For an $L$-byte program,

- if $L \leq 68$, you will receive the full 100 points.
- if $69 \leq L$, you will recieve $\lfloor 2^{0.105(130-n)} \rfloor$ points.

## Sample Input 1

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

## Sample Output 1

```
YES
```

## Sample Input 2

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

## Sample Output 2

```
NO
```