

**Q: A bracket is considered to be following of the characters '(', ')', '[', ']', '{', '}'.**

**Two brackets are considered to be a matched pair if the an opening bracket ( i.e., (, [, or { ) occurs to the left of a closing bracket (i.e., ), ], or }) of the exact same type. There are three types of matched pairs of brackets: [ ], { }, and ( ).**

**A matching pair of brackets is not balanced if the set of brackets it encloses are not matched.**

**For example, { [ ( ) ] } is not balanced because the contents in between { and } are not balanced. The pair of square brackets encloses a single, unbalanced opening bracket, (, and the pair of parentheses encloses a single, unbalanced closing square bracket, ].**

**By this logic, we say a sequence of brackets is balanced if the following conditions are met:**

- 1. It contains no unmatched brackets.**
- 2. The subset of brackets enclosed within the confines of a matched pair of brackets is also a matched pair of brackets.**

**Given n string of rackets, determine whether each sequence of brackets is balanced. If string is balanced, return YES, otherwise return NO.**

**EXAMPLE:**

**Input:**

**2**

**[ ( { } ) ]**

**{ ( ) }**

**Output:**

**YES**

**NO**