Given a string s containing just the characters '(', ')', '{', '}', '[' and ']', determine if the input string is valid.

An input string is valid if:

1. Open brackets must be closed by the same type of brackets.
2. Open brackets must be closed in the correct order.
3. Every close bracket has a corresponding open bracket of the same type.

**Example 1:**

**Input:** s = "()"

**Output:** true

**Example 2:**

**Input:** s = "()[]{}"

**Output:** true

class Solution

{

public boolean isValid(String s)

{

Stack<Character>stack=new Stack<Character>();

for(int i=0; i<s.length(); i++)

{

char element=s.charAt(i);

if(s.charAt(i)=='(' || s.charAt(i)=='['|| s.charAt(i)=='{')

{

stack.push(element);

}

else

{

if(stack.isEmpty())

return false;

if(element==')'&& stack.peek()=='(')

stack.pop();

else if(element=='}'&& stack.peek()=='{')

stack.pop();

else if(element==']'&& stack.peek()=='[')

stack.pop();

else

break;

}

}

return stack.isEmpty();

}

}

