20. Valid Parentheses

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

An input string is valid if:

Open brackets must be closed by the same type of brackets. Open brackets must be closed in the correct order. Note that an empty string is also considered valid.

Example 1:

```
Input: "{[]}"
Output: true
```

```java
class Solution {

    private static final Map<Character, Character> map
    = new HashMap<Character, Character>() {{
        put('(', ')');
        put('{', '}');
        put('[', ']');
    }};

    public boolean isValid(String s) {
        Stack<Character> stack = new Stack<>();

        for(char c: s.toCharArray()) {
            if (map.containsKey(c)) {
                stack.push(c);
            } else if(stack.isEmpty() || map.get(stack.pop()) != c) {
                return false;
            }
        }

        return stack.isEmpty();
    }
}
```