

LAB № 3

Instructions

1. Please write the code for the problems in python language in Jupyter notebook
2. The code should be readable with variables named meaningfully
3. Plagiarism is unacceptable and we have ways to find it. So do not do it.
4. Follow the instructions and define the methods/functions as given in the problem statement.
5. Write test cases wherever required so that they cover all scenarios.

Problem 1

Given a string `s` containing just the characters '(', ')', '{', '}', '[' and ']'. Check to see whether the input string is valid.

An input string is valid if:

1. Open brackets must be closed by brackets of the same kind.
2. Open brackets must be closed in the correct order.
3. Every close bracket is paired with an open bracket of the same type.

Example 1:

Input: `s = "{}"`

Output: `true`

Example 2:

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

Output: `false`

Example 3:

Input: `s = "[(]"`

Output: `false`

```
1 def is_valid_parentheses(s):  
2     '''Your code  
3         comes here'''  
4     return
```
