**EXERCISE.NO:14**

**DATE:19/11/2020**

**AIM:**

*To write a Python class to find validity of a string of parentheses, '(', ')', '{', '}', '[' and ']. These brackets must be close in the correct order, for example "()" and "()[]{}" are valid but "[)", "({[)]" and "{{{" are invalid.*

**PROGRAM:**

*def areBracketsBalenced(expr):*

*stack = []*

*for c in expr:*

*if c in ["(","{","["]:*

*stack.append(c)*

*else:*

*if not stack:*

*return False*

*current\_c = stack.pop()*

*if current\_c == "(":*

*if c != ")":*

*return False*

*if current\_c == "{":*

*if c != "}":*

*return False*

*if current\_c == "[":*

*if c != "]":*

*return False*

*if stack:*

*return False*

*return True*

*if \_\_name\_\_ == "\_\_main\_\_":*

*expr = input(“input:)*

*if areBracketsBalenced(expr):*

*print("output:valid")*

*else:*

*print("output:invalid")*

**LINK:**

*<http://103.53.53.18/mod/vpl/forms/edit.php?id=327&userid=1738#vpl_file0>*

**OUTPUT:**

*input:{{*

*output:invalid*

**RESULT:**

*Program is done and the output is verified.*