***EXERCISE: 14***

***DATE: 20.11.2020***

***AIM:***

*To write a Python class to find validity of a string of parentheses, '(', ')', '{', '}', '[' and '].*

***PROGRAM:***

*def areBracketsBalanced(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 areBracketsBalanced(expr):*

*print("Output: Valid")*

*else:*

*print("Output: Invalid")*

***LINK:***

***http://103.53.53.18/mod/vpl/forms/edit.php?id=327&userid=1648***

***OUTPUT:***

***Graphical user interface, application

Description automatically generated***

***RESULT:***

*The validity of a string of parentheses is successfully verified.*