**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 bracket in expr:

if bracket in ['[','{','(']:

stack.append(bracket)

else:

if not stack:

return False

curr\_brac=stack.pop()

if curr\_brac=='[':

if bracket!=']':

return False

if curr\_brac=='{':

if bracket!='}':

return False

if curr\_brac=='(':

if bracket!=')':

return False

if stack:

return False

return True

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

expr=input()

if areBracketsBalanced(expr):

print("valid")

else:

print("invalid")

**LINK:**

<http://103.53.53.18/mod/vpl/forms/submissionview.php?id=327&userid=1766>

**OUTPUT:**

**Graphical user interface, application

Description automatically generated**

**RESULT:**

The validity of a string of parentheses is successfully verified.