**Ex No: 14**

**Date: 20.11.20**

**AIM:**

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

**PROGRAM:**

def areBracketsBalanced(expr):

stack=[]

for brac in expr:

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

stack.append(brac)

else:

if not stack:

return False

cur\_brac=stack.pop()

if cur\_brac=='[':

if brac!=']':

return False

if cur\_brac=='{':

if brac!='}':

return False

if cur\_brac=='(':

if brac!=')':

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=1804>

**OUTPUT:**

input: ()[]{()}

output: valid

**RESULT:**

The validity of a string of parenthesis is successfully verified.