**Exercise no** : 14

**Date** : 19.11.2020

**AIM:**

Write a Python class to find validity of a string of parentheses, '(', ')', '{', '}', '[' and ']. These brackets must be close in the correct order.

**Program:**

def areBracketsBalanced(expr):

stack=[]

open\_expressions=['{','[','(']

for i in range(len(expr)):

if(expr[i] in open\_expressions):

stack.append(expr[i])

else:

if not stack:

return False

curr=stack.pop()

if(curr =='{' and expr[i]!='}'):

return False

if(curr =='[' andexpr[i]!=']'):

return False

if(curr =='(' and expr[i]!=')'):

return False

if stack:

return False

else:

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=1654>

**OUTPUT:**

 ()[]{()}

Valid

**RESULT:**

Thus the Python class to find validity of a string of parentheses, '(', ')', '{', '}', '[' and ']. Is Exceuted.