**Exercise no:**: 14

**Date:**: 23/11/2020

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

**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 == ‘[‘ and expr[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)):

**Link:http://103.53.53.18/mod/vpl/view.php?id=327**

**Output:**

**Input: ((**

**Output: invalid**

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