**EXERCISE NUMER:** 14

**DATE:** 22/11/2020

**Aim**:

To Write a Python class to find validity of a string of parentheses, '(', ')', '{', '}', '[' and ']. These brackets must be close in the correct order, for example "()" and "()[]{}" are valid but "[)", "({[)]" and "{{{" are invalid.

**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:")

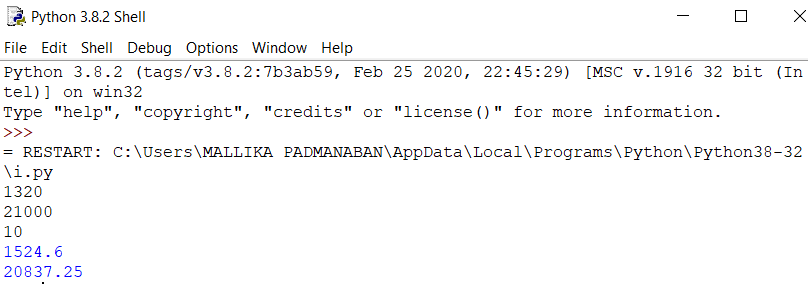
if areBracketsBalanced(expr):

print("Output: Valid")

else:

print("Output: Invalid")

**Output**:



**Link**:

http://103.53.53.18/mod/vpl/forms/submissionview.php?id=327&userid=1710

**Result**:

The output for the given program is obtained.