Exercise No: 14

Date:22/11/2020

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 = []

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")

Link:

<http://103.53.53.18/mod/vpl/forms/edit.php?id=327&userid=1797>

output:

I/P:

()[]{()}

O/P:

Output : valid

Result:

The program executed and the output are obtained successfully and verified.