Exercise No: 14

Date:23/11/2020

Aim:

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

Program:

ope = ["(","{","["]

clo = [")","}","]"]

def areBracketsBalanced(expr):

stack = []

for i in expr:

if i in ope:

stack.append(i)

elif i in clo:

pos = clo.index(i)

if((len(stack) > 0) and (ope[pos] == stack[len(stack)-1])):

stack.pop()

else:

return False

if len(stack) == 0:

return True

else:

return False

if \_\_name\_\_ == "\_\_main\_\_":

expr = input()

if areBracketsBalanced(expr):

if True:

print("output : valid")

else:

print("output : invalid")

else:

print("output : invalid")

Link:

http://103.53.53.18/mod/vpl/forms/edit.php?id=327&userid=1795

output:

I/P:

()[]{()}

O/P:

Output : valid

Result:

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