EXERCISE: 14

DATE: 24/11/2020

AIM:

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

PROGRAM:

def areBracketsBalanced(expr):

stack= []

for i in expr:

if(i=='(' or i=='[' or i=='{'):

stack.append(i)

elif(i==')'):

if(stack[-1]=='('):

stack.pop()

else:

return False

elif(i==']'):

if(stack[-1]=='['):

stack.pop()

else:

return False

elif(i=='}'):

if(stack[-1]=='{'):

stack.pop()

else:

return False

if(len(stack)==0):

return True

else:

return False

expr=input()

if areBracketsBalanced(expr):

print("valid")

else:

print("invalid")

<http://103.53.53.18/mod/vpl/forms/submissionview.php?id=327&userid=1732>

OUTPUT:

({[]})

valid

RESULT:

The above program is executed and output is verified.