*Exercise:14*

*Date: 20/11/2020*

*AIM:*

*To write a Python program to find the validity of a string of parentheses.*

*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]!='}'):
```
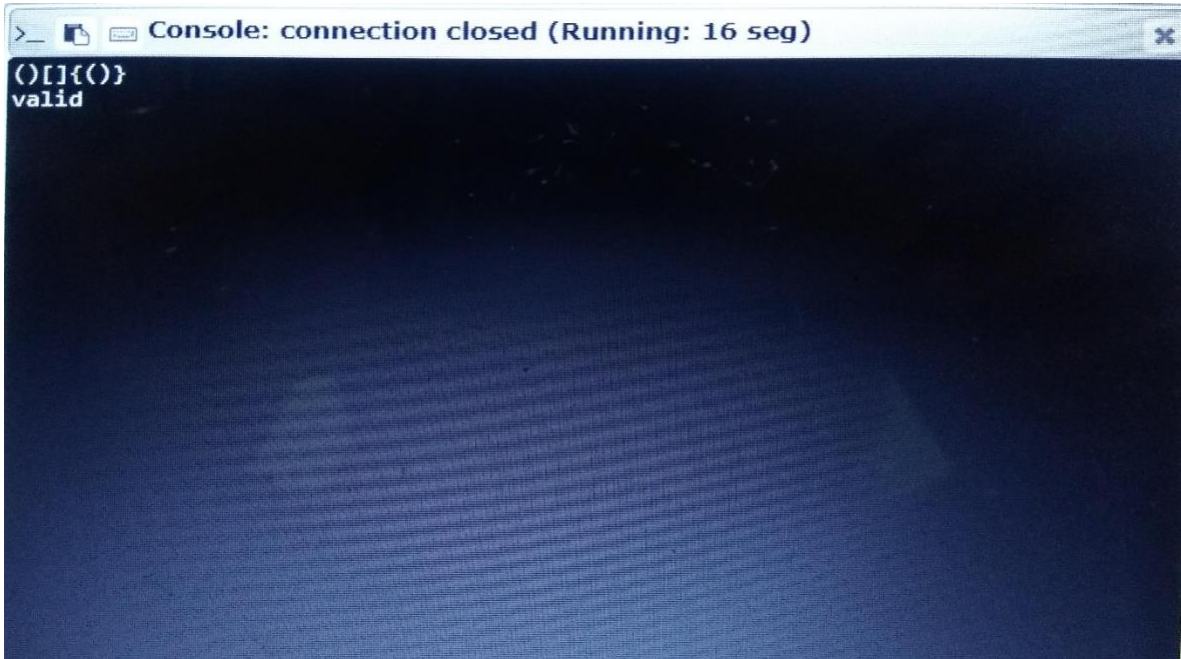
```python
        return False
    if(curr == '[' and expr[i]!=']'):
        return False
    if(curr == '(' and expr[i]!=')'):
        return False
    if stack:
        return False
    else:
        return True
if __name__ == "__main__":
    expr=input()
    if(areBracketsBalanced(expr)):
        print("valid")
    else:
        print("invalid")
```

MOODLE LINK:

*OUTPUT:*



```
Console: connection closed (Running: 16 seg)
()[]{()}
valid
```

*RESULT:*

*The python program to find the validity of the string of parentheses is executed and output is verified*