EXERCISE: 14

DATE: 20.11.2020

AIM:

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

PROGRAM:

```python
def areBracketsBalanced(expr):
  stack = []

  for char in expr:
    if char in ["(","{","["]:
      stack.append(char)
    else:
      if not stack:
        return false
      current_char = stack.pop()
      if current_char == '(':
        if char != ")":
          return False
        if current_char == '{':
          if char != '}':
            return False
        if current_char == '[':
          if current_char == '[':
            if char != "]":
              return False
  if stack:
    return False
  return True
```
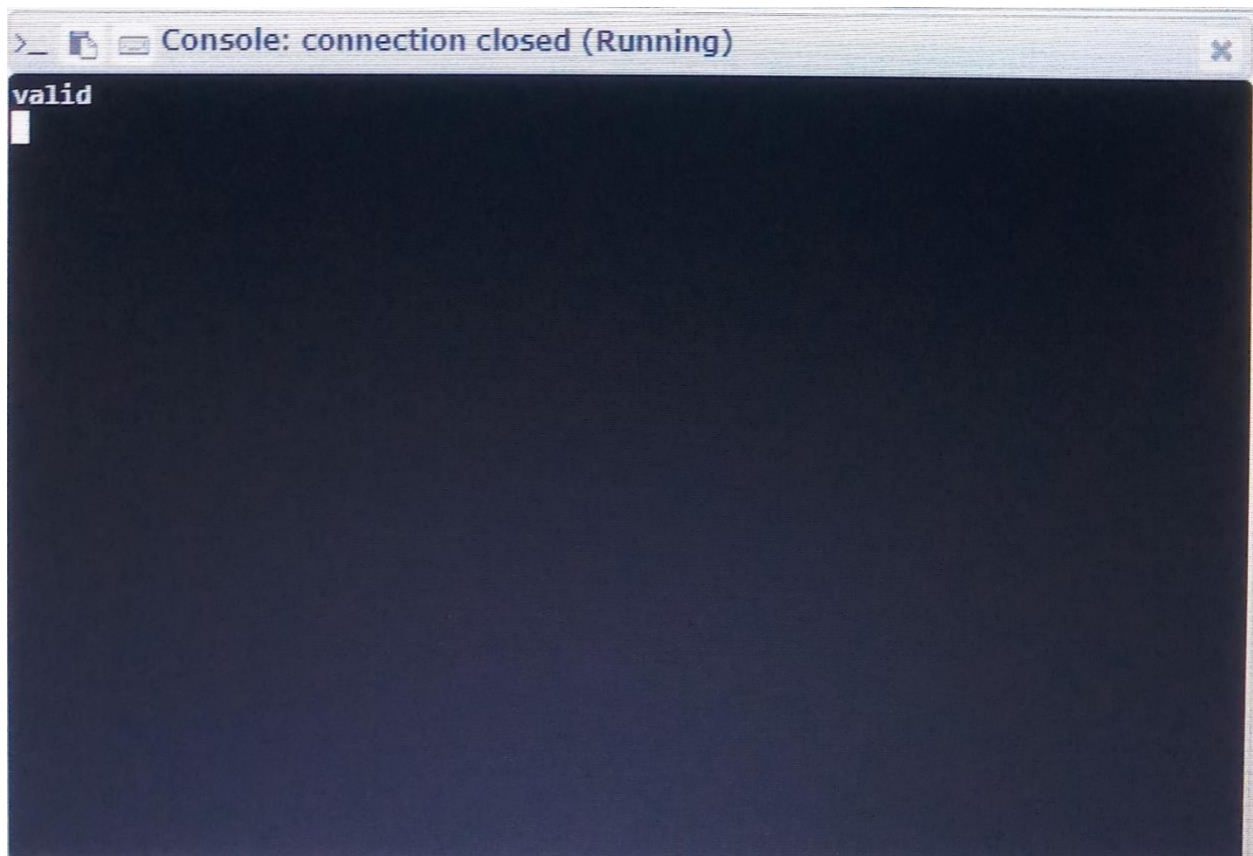
```python
if __name__ == "__main__":

    expr = "{()}[]"

    if  areBracketsBalanced(expr):

        print("valid")

    else:

        print("invalid")
```

LINK:

http://103.53.53.18/mod/vpl/forms/submissionview.php?id=327&userid=1690

OUTPUT:

>_ 🔲 ✉ Console: connection closed (Running)   ✖

valid

RESULT:

   The validity of a string of parentheses is successfully verified.