Q. Write a python program to draw a triangle shape using print statement only.

```
    *
   * *
  *   *
 *     *
* * * * *
```

```
r = 5
print(" " * (r - 1) + "*")
print(" " * (r - 2) + "*" + " " * (r - 4) + "*")
print(" " * (r - 3) + "*" + " " * (r - 2) + "*")
print(" " * (r - 4) + "*" + " " * r + "*")
print("* * * * *")
```

```
    *
   * *
  *   *
 *     *
* * * * *
```

Assignment: Python as a Calculator

```
# Python as a Calculator (Script Mode)
class Calculator:
    def add(self, *args):
        result = sum(args)
        return f"The sum of the numbers is {result}."

    def sub(self, a, b):
        sub = a - b
        return f"The substraciton operation is {sub}."

    def mul(self, a, b):
        mul = a * b
        return f"The multiplication operation is {mul}."

    def div(self, a, b):
        div = a / b
        return f"The division operation is {div}."

    def floor(self, a, b):
        floor_div = a // b
```

```
        return f"The floor division is {floor_div}."

    def exp(self, a, b):
        exp = a ** b
        return f"The exponentiation operation is {exp}."

    def mod(self, a, b):
        mod = a % b
        return f"The modulus operation is {mod}."

operation = Calculator()
print(operation.add(23, 23, 44, 12, 53))
print(operation.sub(a=45, b=23))
print(operation.mul(a=45, b=3))
print(operation.div(a=45, b=9))
print(operation.floor(a=33, b=4))
print(operation.exp(a=4, b=4))
print(operation.mod(a=56,b=11))
```

```
The sum of the numbers is 155.
The substraciton operation is 22.
The multiplication operation is 135.
The division operation is 5.0.
The floor division is 8.
The exponentiation operation is 256.
The modulus operation is 1.
```

Assignment from Chapters 2 (Operators, Variables and Keywords)

```
# Create a variable named variable test in snake case format and
assign value “my
# first variable assignment”. Print the result.

variable_test = "my first variable assignment"
print(variable_test)
```

```
my first variable assignment
```

```
# Create a variable named age and assign value as 20. Print the
result.
age = 20
print(age)
```

```
20
```

```
#  Create a variable called z, assign x + y to it, and Display the
result.
```

```
# Initialize,
# x = 20, y = 30

x = 20
y = 30
z = x + y
print(z)
```

```
50
```

```
# Create three variables x, y, z and assign same value to all 3
variables in one code
# line.

x, y, z = 3, 3, 3
print(x, y, z)
```

```
3 3 3
```

```
# Develop basic calculator app for the user:
# a. Input two numbers from user and assign it to variable num1 and
num2
# b. Perform addition of two numbers and assign to variable result_add
# c. Display result_add to user.

num1 = int(input("Enter first number: "))
num2 = int(input("Enter second numer: "))
result_add = num1 + num2
print(result_add)
```

```
Enter first number: 45
Enter second numer: 66
111
```