

1. Write a program to print a right-angled triangle using * with 5 rows.

Program Code:

```
rightangle.py - C:/Users/srive/OneDrive/Documents/python,
File Edit Format Run Options Window Help
rows = 5
for i in range(1, rows + 1):
    print('*' * i)
```

Output:

```
>>>
===== RESTART: C:/Users/srive/OneDrive/Documents/python/rightangle.py =====
*
**
***
****
*****
>>>
```

2. Write a program to print a pyramid of numbers where each row contains increasing numbers starting from 1.

Python Code:

```
rows = 5
for i in range(1, rows + 1):
    for j in range(1, i + 1):
        print(j, end=' ')
    print()
```

Output:

```
>>>
===== RESTART: C:/Users/srive/OneDrive/Documents/python/rightangle.py =====
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
>>>
```

3. Write a program to print an inverted triangle of stars.

Python Code:

```
rows = 5
for i in range(rows, 0, -1):
    print('*' * i)
```

Output:

```
>>> ===== RESTART: C:/Users/srive/OneDrive/Documents/python/rightangle.py =====
*****
****
***
**
*
```

4. Write a program to print a centered pyramid of stars.

Python Code:

```
rows = 5
for i in range(1, rows + 1):
    print(' ' * (rows - i) + '*' * (2 * i - 1))
```

Output:

```
>>> ===== RESTART: C:/Users/srive/OneDrive/Documents/python/rightangle.py =====
      *
     ***
    *****
   *****
  *****
 *****
>>>
```

5. Write a program to print a diamond pattern using stars.

Python Code:

```
rows = 5
# Upper half
for i in range(1, rows + 1):
    print(' ' * (rows - i) + '*' * (2 * i - 1))
# Lower half
for i in range(rows - 1, 0, -1):
    print(' ' * (rows - i) + '*' * (2 * i - 1))
```

Output:

```
>>>
===== RESTART: C:/Users/srive/OneDrive/Documents/python/rightangle.py =====
    *
   **
  ***
 ****
*****
*****
 *****
  *****
   ****
    ***
     *
>>>
```