

Half Pyramid using *

```
n = 5
for i in range(0, n):
    for j in range(0, i+1):
        print("*", end=" ")
    print("\n")
```

Output:

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

Inverted half Pyramid using *

```
rows = int(input("Enter the number of rows: "))
for i in range(rows-1, -1, -1):
    for j in range(0, i+1):
        print("*", end=" ")
    print("\n")
```

Output: Enter the number of rows: 5

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

Triangle Pyramid using *

```
n = int(input("Enter the number of rows: "))
m = (2 * n) - 2
for i in range(0, n):
    for j in range(0, m):
        print(end=" ")
    m = m - 1
    for j in range(0, i+1):
        print("*", end=" ")
    print("\n")
```

Output: Enter the number of rows: 5

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

n = 5

k = 2 * n - 2

```
for i in range(0, n):
    for j in range(0, k):
        print(end=" ")
    k = k - 2
    for j in range(0, i+1):
        print("*", end=" ")
    print("\n")
```

Output:

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

rows = int(input("Enter the number of rows: "))

```
i = rows
while i >= 1:
    j = rows
    while j > i:
        print(' ', end=" ")
    j = j - 1
    k = 1
    while k <= i:
        print('*', end=" ")
    k = k + 1
    print("\n")
    i = i - 1
```

Output: Enter the number of rows: 5

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

Inverted Triangle Pyramid

```
rows = 5
k = 2 * rows - 2
for i in range(rows-1, -1, -1):
    for j in range(k, 0, -1):
        print(end=" ")
    k = k + 1
    for j in range(0, i+1):
        print("*", end=" ")
    print("\n")
```

Output:

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


Half Pyramid with number

```
rows = int(input("Enter the number of rows: "))  
for i in range(1, rows+1):  
    for j in range(1, i+1):  
        print(j, end=" ")  
    print("\n")
```

Output:

Enter the number of rows: 5

```
1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5
```

Triangle Pyramid using number

```
size = 5  
for i in range(size):  
    for j in range(i):  
        print(end=" ")  
    for k in range(size-i-1):  
        print(k+1, end=" ")  
    print("\n")
```

Output:

```
1 2 3 4  
 1 2 3  
   1 2  
    1
```

Inverted half pyramid using numbers

```
rows = 5  
for i in range(rows, 0, -1):  
    for j in range(1, i+1):  
        print(j, end=" ")  
    print("\n")
```

Output:

```
1 2 3 4 5  
1 2 3 4  
1 2 3  
1 2  
1
```

Numbers without reassigning

```
def countnum  
    num = 1  
    for i in range(0, n):  
        for j in range(0, i+1):  
            print(num, end=" ")  
            num = num + 1  
        print("\n")
```

n = 5
countnum(n)

Output:

```
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```


Worksheet-1

1.0

1.0 2.0

1.0 2.0 3.0

1.0 2.0 3.0

2)

1

2 3

4 5 6

7 8 9 10

3)

1

4 9

16 25 36

4)

1

2 1

3 2 1

4 3 2 1

5 4 3 2 1

5)

1

1 2

1 2 3

1 2 3 4

1 2 3

1 2

1

6)

1

4 1

9 4 1

16 9 4 1

25 16 9 4 1

7)

36 25 16

4 9

1

8)

0.1

0.2 0.3

0.4 0.5 0.6

0.7 0.8 0.9 1.0

9)

1.4

1.5 1.6

1.7 1.8 1.9

2.0 2.1

2.2

10)

2.2

2.0 2.1

1.7 1.8 1.9

1.5 1.6

1.4

11)

5 4 3 2 1

4 3 2 1

3 2 1

2 1

1

12)

0.1

0.2 0.2

0.3 0.3 0.3