simple pyramid pattern

```
def pypat(n):
    for i in range(0, n):
        for j in range(0, i+1):
            print("* ", end="")
        # ending line after each row
        print("\r")

# Driver code
n=5
pypat(n)
```

---

range() function returns a sequence of numbers, starting from 0 by default and increments by 1 (by default) and stops before a specified number.

Using recursion

```
def pypat(n):
    if n==0:
        return
    else:
        pypat(n-1)
        print("* "*n)
```

height)

Driver code

```
n = 5
pypart(n)
```

Using while loop

```
n = 5
i = 1; j = 0
while (i <= n):
    while (j <= i-1):
        print("* ", end = " ")
        j += 1
    print("\r")
    j = 0; i += 1
```

After 180 rotation

```
def pypart2(n):
    k = 2*n - 2    # number of spaces
    for i in range(0, n):    # no. of rows
        for j in range(0, k):
            print(end = " ")
        k = k - 2
        for j in range(0, i+1):
            print("* ", end = " ")
```

print "(" \n")

Driver code

n = 5

pyramid2(n)

Printing Triangle

```
def triangle(n):
    k = n-1    # number of spaces
    for i in range(0, n):
        for j in range(0, k):
            print(end=" ")

        k = k-1

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

        print("\n")

# Driver code
n = 5
triangle(5)
```

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

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

# Driver code
n = 5
numpat(n)
```

Number without reassigning

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

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

# Driver Code.
n = 5
```

```
B B
C C C
D D D D
E E E E E
```

```
def alphapat(n):
    num = 65
    for i in range(0,n):
        for j in range(0,i+1):
            ch = chr(num)
            print(ch, end=" ")
        num = num+1
        print("\n")
# Driver code
n=5
alphapat(n)
```

- Continuous character pattern

```
A
B C
D E F
G H I J
K L M N O
```

```
def contalpha(n):
    num=65
    for i in range(0,n):
        for j in range(0,i+1):
            ch = chr(num)
            print(ch, end=" ")
            num = num+1
        print("\n")
n=5
contalpha(n)
```