MODULE-2

PPT-2

Pattern printing

```
n = int(input("Enter any
number"))
for i in range(n):
   for j in range(i):
      print(i, end=" ")
   print(" ")
```

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

```
n = 5
for i in range(1,n+1):
    for j in range(1,i+1):
        print(j, end="")
        print("\r")
        1 2 3 4
        1 2 3 4 5
```

```
n = 5
m=1
for i in range(n,0,-1):
    for j in range(1,i+1):
        print(m, end="")
        print("\r")
        m = m + 1
1 1 1 1 1
2 2 2 2
3 3 3
4 4
```

Practice

Pyramid

```
• n = 5
• k = n - 1
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("\r")
```

Reverse pyramid

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

```
* * * * * *

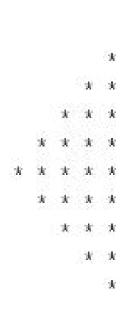
* * * *

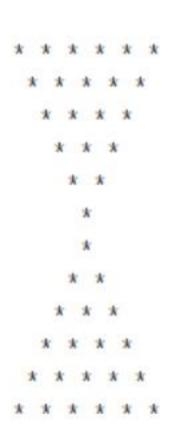
* * *

* *
```

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

Practice questions





Diamond and Pascal's Triangle Program

```
1
1 1
1 2 1
1 3 3 1
1 4 6 4 1
1 5 10 10 5 1
1 6 15 20 15 6 1
```

A
ABC
ABCD
ABCDE
ABCDEF
GHIJK
LMNO
PQR
ST

A B C D E F G F E D C B A
A B C D E F F E D C B A
A B C D E F F D C B A
A B C D E F D C B A
A B C D F F F E D C B A
A B C A B C A A

A B A B A 1 1 1 A B C B A 1 3 3 1 A B C D C B A 1 4 6 4 1