

Shubhangi_Dhikale_35

Write a Python Programs to print below Pattern:

```
In [2]: 1)

# *
# * *
# * * *
# * * * *
# * * * * *

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

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

```
In [18]: 2

#           *
#         * *
#       * * *
#     * * * *
# * * * * *

n=5
for i in range(1,n+1):
    for j in range(1,n+1):
        if (j<=n-i):
            print(" ",end=" ")
        else:
            print("*",end=" ")
    print()
```

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

In [25]:

```

3

#      *
#     * *
#    * * *
#   * * * *
#  * * * * *
n=5

for i in range(1,n+1):
    for j in range(1,n+1):
        if (j<=n-i):
            print(" ",end="")
        else:
            print("*",end=" ")
    print()

```

```

      *
     * *
    * * *
   * * * *
  * * * * *

```

In [26]:

```

# 4.
# * * * * * * * * *
#  * * * * * * *
#   * * * * *
#    * * *
#     *

n=6
for i in range(n,0,-1):
    num=1
    for j in range(n,0,-1):
        if j>i:
            print(" ",end="")
        else:
            print("*",end=" ")
    print()

```

```

* * * * * *
 * * * * *
  * * * *
   * * *
    * *
     *

```

In [9]: 5)

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

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

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

In [10]: 6)

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

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

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

```

In [12]: # 7)
#      1
#     1 1
#    1 2 1
#   1 3 3 1
#  1 4 6 4 1

n=5
a=1
for i in range(1,n+1):
    for j in range(1,(n-i)+1):
        print(" ",end=" ")

    for j in range(0,i):
        if j==0 or i==0:
            a=1
        else:
            a=a*(i-j)//j
        print(a,end=' ')

    print()

```

```

      1
     1 1
    1 2 1
   1 3 3 1
  1 4 6 4 1

```

In []:

In [1]: 8)

```

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

n=5
c=1
for i in range(1,n+1):
    for j in range(i):
        print(c,end=" ")
        c+=1
    print()

```

```

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

```

```
In [25]: 9)
# A
# B B
# C C C
# D D D D
# E E E E E

n=5
c=65
for i in range(1,n+1):
    for j in range(i):
        print(chr(c),end=" ")
        c+=1
    print()
```

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

```
In [26]: 10.
# A
# B C
# D E F
# G H I J
# K L M N O

n=5
c=65
for i in range(1,n+1):
    for j in range(i):
        print(chr(c),end=" ")
        c+=1
    print()
```

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

```
In [28]: 11
# K
# K K
# K K K
# K K K K
# K K K K K

n=5
c=75
for i in range(1,n+1):
    for j in range(i):
        print(chr(c),end=" ")
    print()
```

```
K
K K
K K K
K K K K
K K K K K
```

```
In [53]: 12
# A
# A B
# A B C
# A B C D
# A B C D

n=6
for i in range(1,n):
    c=65
    for j in range(i):
        print(chr(c),end=" ")
        c+=1
    print()
```

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

```
In [59]: 13.  
# P  
# Py  
# Pyt  
# Pyth  
# Pytho  
# Python  
  
x="python"  
a=""  
for i in x:  
    a=a+i  
    print(a)
```

p
py
pyt
pyth
pytho
python

```
In [61]: 14.  
# 1 1 1 1 1  
# 2 2 2 2  
# 3 3 3  
# 4 4  
# 5  
  
n=5  
for i in range(n):  
    for j in range(n-i,0,-1):  
        print(i+1,end=' ')  
    print()
```

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

```
In [20]: 15.  
# 6 6 6 6 6 6  
# 5 5 5 5 5  
# 4 4 4 4  
# 3 3 3  
# 2 2  
# 1  
  
n=6  
for i in range(n,0,-1):  
    for j in range(i):  
        print(i,end=" ")  
    print()
```

```
6 6 6 6 6 6  
5 5 5 5 5  
4 4 4 4  
3 3 3  
2 2  
1
```

```
In [41]: 16.  
# 0 1 2 3 4 5  
# 0 1 2 3 4  
# 0 1 2 3  
# 0 1 2  
# 0 1  
  
n=6  
for i in range(n,1,-1):  
    for j in range(i):  
        print(j,end=' ')  
    print()
```

```
0 1 2 3 4 5  
0 1 2 3 4  
0 1 2 3  
0 1 2  
0 1
```



```
In [97]: 17.  
# 1  
# 2 3 4  
# 5 6 7 8 9  
  
n=5  
for i in range(1,n):  
    for j in range(i):  
        print(j+1,end=" ")  
  
    print()
```

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

```
In [82]: 18.  
  
# 6 5 4 3 2 1  
# 5 4 3 2 1  
# 4 3 2 1  
# 3 2 1  
# 2 1  
# 1  
  
n=6  
for i in range(n,0,-1):  
    for j in range(i):  
        print(i,end=" ")  
        i-=1  
    print()
```

```
6 5 4 3 2 1  
5 4 3 2 1  
4 3 2 1  
3 2 1  
2 1  
1
```

In [10]: 19.

```

# 1
# 3 3
# 5 5 5
# 7 7 7 7
# 9 9 9 9 9

n=5

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

```

```

1
3 3
5 5 5
7 7 7 7
9 9 9 9 9

```

In [4]: 20.

```

#          1
#         1 2
#        1 2 3
#       1 2 3 4
#      1 2 3 4 5

n=6
for i in range(1,n):
    num=1
    for j in range(n,0,-1):
        if j>i:
            print(" ",end=" ")
        else:
            print(num,end=" ")
            num+=1
    print()

```

```

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

```

```
In [11]: 21.
# 1 2 3 4 5
# 2 2 3 4 5
# 3 3 3 4 5
# 4 4 4 4 5
# 5 5 5 5 5

n=5
for i in range(1,n+1):
    for j in range(1,n+1):
        if j<=i:
            print(i,end=' ')
        else:
            print(j,end=' ')
    print()
```

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

```
In [1]: 22.
# 1
# 2 4
# 3 6 9
# 4 8 12 16
# 5 10 15 20 25
# 6 12 18 24 30 36
# 7 14 21 28 35 42 49

n=7
for i in range(1,n+1):
    for j in range(1,i+1):
        sqaure=i*j
        print(i*j,end=" ")
    print()
```

```
1
2 4
3 6 9
4 8 12 16
5 10 15 20 25
6 12 18 24 30 36
7 14 21 28 35 42 49
```

```
In [5]: 23.  
# 1  
# 2 1  
# 4 2 1  
# 8 4 2 1  
# 16 8 4 2 1  
# 32 16 8 4 2 1  
# 64 32 16 8 4 2 1  
# 128 64 32 16 8 4 2 1  
  
n=9  
for i in range(1,n):  
    for j in range(-1+i,-1,-1):  
        print(2 ** j,end=" ")  
    print(" ")
```

```
1  
2 1  
4 2 1  
8 4 2 1  
16 8 4 2 1  
32 16 8 4 2 1  
64 32 16 8 4 2 1  
128 64 32 16 8 4 2 1
```

In [8]:

```

24.
# *
# * *
# * * *
# * * * *
# * * * * *
# * * * * * *
# * * * * * * *
# * * * * * * *
# * * * * * *
# * * * * *
# * * * *
# * * *
# * *
# *

n=7
for i in range(n):
    for j in range(i+1):
        print("*",end=" ")
    print()
for i in range(n,0,-1):
    for j in range(i):
        print("*",end=" ")
    print()

```

```

*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * *
* * * * * *
* * * * *
* * * *
* * *
* *
*

```

In [12]: 25.

```

# *
# * *
# * * *
# * * * *
# * * * * *
# * * * * * *

# * * * * * *
# * * * * *
# * * * *
# * * *
# * *
# *

n=6
for i in range(0,n):
    for j in range(0,i+1):
        print("*",end=" ")
    print(" ")

print(" ")

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

```

```

*
* *
* * *
* * * *
* * * * *
* * * * * *

* * * * * *
* * * * *
* * * *
* * *
* *
*

```

In []:

In []: