

1. Right Angle Triangle Pattern

```
In [2]: for i in range(1,6):  
        print(' * ' * i)
```

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

2. Inverted Right Angle Triangle Pattern

```
In [4]: for i in range(5, 0, -1):  
        print(' * ' * i)
```

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

3. Pyramid Pattern

```
In [6]: for i in range(1, 6):  
        print(' ' * (5 - i) + '*' * (2 * i - 1))
```

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

4. Inverted Pyramid Pattern

```
In [7]: for i in range(5, 0, -1):  
        print('*'(5-i)+' * '*(2*i-1))
```

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

5. Diamond Pattern

```
In [11]: for i in range(1, 6):  
        print('*'(5-i)+' * '*(2*i-1))
```

```
for i in range(4,0,-1):
    print('*'(5-i)+' * '*'(2*i-1))
```

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

6. Hallow Square Pattern

```
In [13]: for i in range(5):
        for j in range(5):
            if i==0 or i==4 or j==0 or j==4:
                print('*',end='')
            else:
                print(' ',end='')
        print()
```

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

7. Full Square Pattern

```
In [14]: for i in range(5):
        print('*' * 5)
```

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

8. Right Angle Triangle(Number pattern)

```
In [15]: for i in range(1, 6):
        print(' '.join(str(x) for x in range(1, i+1)))
```

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

9. Inverted Right Angle Triangle (Number Pattern)

```
In [16]: for i in range(5, 0, -1):
          print(' '.join(str(x) for x in range(1,i+1)))
```

```

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

```

10. Floyd's Triangle

```
In [17]: num = 1
          for i in range(1,6):
              for j in range(1, i+1):
                  print(num, end=' ')
                  num+=1
              print()
```

```

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

```

11. Hallow Right Angle Triangle

```
In [20]: for i in range(1,6):
          for j in range(1, i+1):
              if j==1 or j==i or i==5:
                  print('*', end=' ')
              else:
                  print(' ', end=' ')
          print()
```

```

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

```

12. Hallow Pyramid Pattern

```
In [1]: for i in range(1, 6):
        for j in range(5 - i):
            print(' ', end=' ')
        for j in range(2 * i - 1):
            if j==0 or j == 2*i-2 or i==5:
                print('*', end=' ')
```

```

        else:
            print(' ', end=' ')
    print()

```

```

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

```

13. Hallow Diamond Pattern

```

In [3]: n = 5
for i in range(1, n+1):
    for j in range(n-i):
        print(' ', end=' ')
    for j in range(2 * i - 1):
        if j==0 or j==2 * i - 2:
            print('*', end=' ')
        else:
            print(' ', end=' ')
    print()

for i in range(n-1,0, -1):
    for j in range(n-i):
        print(' ', end=' ')
    for j in range(2 * i - 1):
        if j==0 or j==2 * i - 2:
            print('*', end=' ')
        else:
            print(' ', end=' ')
    print()

```

```

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

```

14. Hallow Diamond (Number Pattern)

```

In [4]: n = 5
for i in range(1, n+1):
    for j in range(n-i):
        print(' ', end=' ')
    for j in range(2 * i - 1):
        if j==0 or j== 2*i-2:
            print(i, end=' ')
        else:
            print(' ', end=' ')
    print()

for i in range(n-1,0,-1):

```

```

for j in range(n-i):
    print(' ',end=' ')
for j in range(2 * i -1):
    if j==0 or j== 2*i-2:
        print(i, end=' ')
    else:
        print(' ', end= ' ')
print()

```

```

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

```

15. Butterfly Pattern

```

In [2]: n = 5
for i in range(1, n+1):
    for j in range(1, i+1):
        print(j , end=' ')
    for j in range(2*(n-i)):
        print(' ', end=' ')
    for j in range(1, i+1):
        print(j, end=' ')
    print()

for i in range(n, 0, -1):
    for j in range(1,i+1):
        print(j , end=' ')
    for j in range(2*(n-i)):
        print(' ', end=' ')
    for j in range(1, i+1):
        print(j, end=' ')
    print()

n = 5
for i in range(1, n+1):
    for j in range(i):
        print('*', end=' ')
    for j in range(2 * (n-i)):
        print(' ', end=' ')
    for j in range(i):
        print('*', end=' ')
    print()
for i in range(n, 0, -1):
    for j in range(i):
        print('*', end=' ')
    for j in range(2 * (n-i)):
        print(' ', end=' ')
    for j in range(i):
        print('*', end=' ')
    print()

```

```

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

```

16. Hallow Number Pyramid

```

In [4]: n = 5
for i in range(1, n+1):
    for j in range(n - i):
        print(' ', end=' ')

    for j in range(1, 2 * i):
        if j == 1 or j == 2 * i - 1 or i == n:
            print(i, end=' ')
        else:
            print(' ', end=' ')
    print()

```

```

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

```

17. Full Star Pyramid

```

In [5]: n = 5

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

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

    print()

```

```

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

```

18. Inverted Full Star Pyramid

```

In [6]: n = 5
        for i in range(n, 0, -1):
            for j in range(n-i):
                print(' ',end=' ')
            for j in range(2 * i -1):
                print('*', end=' ')

            print()

```

```

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

```

19. Left aligned Pyramid Pattern

```

In [9]: n = 5

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

        n = 5

        for i in range(1, n+1):
            for j in range(1, i+1):
                print(j, end=' ')
            print()

```

```

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

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

```

20. Right Aligned Pyramid Pattern

```

In [11]: n = 5

         for i in range(1, n+1):

```

```

    for j in range(n-i):
        print(' ', end=' ')

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

    print()

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

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

    print()

```

```

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

```