1.Right Angle Triangle Pattern

In [59]:
```
for i in range(1,6):
    print(' * ' *i)
```

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

2. Inverted Right Angle Triangle Pattern

In [57]:
```
for i in range(5,0,-1):
    print(' * ' *i)
```

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

3.Pyramid Pattern

In [55]:
```
for i in range (1,6):
    print(''*(5-i)+' * '*(2*i-1))
```

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

4.Inverted Pyramid Pattern

In [53]:
```
for i in range (5,0,-1):
    print(''*(5-i)+' * ' *(2*i-1))
```

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

5.Diamond Pattern

In [51]:
```
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 [49]:
```
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 [47]:
```
for i in range(5):
    print(' * '*5)
```

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

8.Right Angle triangle(Number Pattern)

In [45]:
```
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 [62]:
```
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 [65]:
```
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 [79]:
```
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 [103…

```
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 [106…

```
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 [110…

```
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 [115…

```
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 [119…

```
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 5
```

17.Full Star Pyramid

In [122…

```
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 [125…

```
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 [128…
```
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 [133…
```
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()

n = 5

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

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


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

```
    print()
```

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