1. Right Angle Triangle Pattern

In [3]:
```
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 [5]:
```
for i in range(1,6):
    print(''*(5-i)+' * ' * (2*i-1))
```

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

4. Inverted Pyramid Pattern

In [6]:
```
for i in range (5,0,-1):
    print(''*(5-i)+' * ' *(2*i-1))
```

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

5. Diamond Pattern

In [9]:
```
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 [8]:
```
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 [10]:
```
for i in range(5):
    print(' * '*5)
```

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

8. Right Angle Triangle (Number Pattern)

In [13]:
```
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 [14]:
```
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 [15]:
```
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 [17]:
```
for i in range(1,6):
    for j in range(1,i+1):
        if j==1 or j==1 or i==5:
            print('*',end=' ' )
        else:
            print(' ',end=' ' )
    print()
```

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

12. Hallow Pyramid Pattern

In [18]:
```
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 [19]:
```
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 [20]:
```
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
22
33
44
55
44
33
22
1
```

Buttefly Pattern

In [24]:
```
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 i 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()
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                 7
1 2             5 5
1 2 3         3 3 3
1 2 3 4     1 1 1 1
1 2 3 4 5 5 5 5 5 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 [26]:
```
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 [27]:
```
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 [28]:
```
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 [29]:
```
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 [30]:
```
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
*
* *
* * *
* * * *
* * * * *
```

In [ ]: