1.Right-Angle Triangle

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

```
$
$  $
$  $  $
$  $  $  $
$  $  $  $  $
```

2.Inverted Right-Angle

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

```
$  $  $  $  $
$  $  $  $
$  $  $
$  $
$
```

3.Pyramid

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

```
&
&  &  &
&  &  &  &  &
&  &  &  &  &  &  &
&  &  &  &  &  &  &  &  &
```

4.Inverted Pyramid

In [4]:
```
for i in range(5,0,-1):
    print(' & '*(2*i-1))
```

```
&  &  &  &  &  &  &  &  &
&  &  &  &  &  &  &
&  &  &  &  &
&  &  &
&
```

5.Diamond

In [5]:
```
for i in range(1,6):
    print(' & '*(2*i-1))
for i in range(4,0,-1):
    print(' & '*(2*i-1))
```

```
&
&  &  &
&  &  &  &  &
&  &  &  &  &  &  &
&  &  &  &  &  &  &  &  &
&  &  &  &  &  &  &
&  &  &  &  &
&  &  &
&
```

6.Hallow Square

In [6]:
```
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

In [7]:
```
for i in range(5):
    print(' ^ '*5)
```

```
 ^  ^  ^  ^  ^
 ^  ^  ^  ^  ^
 ^  ^  ^  ^  ^
 ^  ^  ^  ^  ^
 ^  ^  ^  ^  ^
```

8.Numbered Right-Angle

In [8]:
```
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

In [9]:
```
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 [10]:
```
num=1
for i in range(1,6):
    for j in range(1,i+1):
        print(num,end=' ')
        num=num+1
    print()
```

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

11.Hallow Right-Angle

In [11]:
```
for i in range(1,6):
    for j in range(1,i+1):
        if j==1 or i==5 or j==i:
            print(' * ',end='')
        else:
            print('   ',end='')
    print()
```

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

12.Hallow Pyramid

In [12]:
```
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

In [13]:
```
for i in range(1,5):
    for j in range(5-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(5,0,-1):
    for j in range(5-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.Number Pattern

In [14]:
```
for i in range(1,5):
    for j in range(5-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(5,0,-1):
    for j in range(5-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 [15]:
```
n=5
for i in range(1,n+1):
    for j in range(1,i+1):
        print(j,end=' ')
    for j in range(2*(5-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*(5-i)):
        print(' ',end=' ')
    for j in range(1,i+1):
        print(j,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
```

In [16]:
```
n=5
for i in range(1,n+1):
    for j in range(1,i+1):
        print('#',end=' ')
    for j in range(2*(5-i)):
        print(' ',end=' ')
    for j in range(1,i+1):
        print('*',end=' ')
    print()

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

```
        print('#',end=' ')
    print()
```

```
#                 *
# #             * *
# # #         * * *
# # # #     * * * *
# # # # # * * * * *
* * * * * # # # # #
* * * *     # # # #
* * *         # # #
* *             # #
*                 #
```

16.Hallow Number Pyramid

In [17]:
```
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

In [18]:
```
n=5
for i in range(1,n+1):
    for j in range(n-i):
        print(' ',end=' ')

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

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

18.Inverted

In [19]:
```
n=5
for i in range(n,0,-1):
    for j in range(n-i):
        print(' ',end=' ')
```

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

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

19.Left-Aligned

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

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

In [21]:
```
for i in range(1,6):
    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

In [22]:
```
for i in range(1,6):
    for j in range(n-i):
        print(' ',end=' ')
    for j in range(1,i+1):
        print('*',end=' ')
    print()
```

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

In [23]:
```
for i in range(1,6):
    for j in range(n-i):
        print(' ',end=' ')
    for j in range(1,i+1):
        print(j,end=' ')
    print()
```

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