PATTERNS

In [1]:
```
# PRINTING PATTERNS
```

In [6]:
```
for i in range(5):

    i=i+1
    print('# # # #')
```

```
# # # #
# # # #
# # # #
# # # #
# # # #
```

In [31]:
```
# right triangle
for i in range(1,6):

    print('* '*i)
```

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

In [35]:
```
#inverted right triangle
for i in range(5,0,-1):

    print('* '*i)
```

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

In [76]:
```
# pyramid pattern

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

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

In [84]:
```
# inverted pyramid pattern

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

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

In [85]:
```
# pyramid pattern

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

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

In [86]:
```
# hallow square
```

In [107…
```
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()
```

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

In [111…
```
# full square pattern
for i in range(5):
    print('*'*10)
```

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

In [177…
```
# right angled triangle number pattern
num=1
for i in range(0,6):
    for j in range (i):
       print (j,end='')

    print(i)
```

```
0
01
012
0123
01234
012345
```

In [161…
```
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
```

In [165…
```
# inverted right angled triangle number pattern
for i in range(6,0,-1):
    for j in range (i):
       print (j,end=' ')
    print(i)
```

```
0 1 2 3 4 5 6
0 1 2 3 4 5
0 1 2 3 4
0 1 2 3
0 1 2
0 1
```

In [166…
```
for i in range(6,0,-1):
    print(' '.join(str(x) for x in range(1,i+1)))
```

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

In [173…
```
#floyds  triangle
```

In [174…
```
num=1
for i in range(1,7):
    for j in range(1,i+1):
        print(num,end='')
        num+=1
```

```
    print()
```

```
1
23
456
78910
1112131415
161718192021
```

Hallow right triangle

In [185…
```
for i in range(0,6):
    for j in range(1,i+1):
        if j==1 or j==i or i==5:
            print('#',end=' ')
        else:
            print(' ',end=' ')
    print()
```

```
#
# #
#   #
#     #
# # # # #
```

Hallow pyramid pattern

In [200…
```
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()
```

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

In [ ]:
```

```