1. Right Angle Triangle Patterns

```
In [249...
          for i in range(1,6):
               print(' * ' * i)
          2.Inverted Right Angle Triangle Pattern
In [252...
          for i in range(5,0,-1):
              print(' * ' *i)
          3.Pyramid Pattern
In [257...
          for i in range(1,6):
              print(''*(5-i) + ' * ' * (2*i-1))
          4.Inverted Pyramid Pattern
          for i in range (5,0,-1):
In [270...
              print(''*(5-i)+'*'*(2*i-1))
         *****
         *****
          5.Diamond Pattern
In [274...
          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 [226...
           for i in range(5):
               for j in range(5):
                   if i == 0 or i == 4 or j == 0 or j == 4:
                        print('*', end=' ')
                        print(' ', end=' ')
               print()
           7.Full Square Pattern
In [228...
           for i in range(5):
               print(' * '*5)
           8. Right Angle Triangle (Number Pattern)
In [221...
          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 [216...
          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 [209...
          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 [204...
          n = 5
          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 [194...
          n = 5
          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 [185...
          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=' ')
                      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)

```
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()
```

15.Butterfly Pattern

```
In [169...
          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(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(j,end=' ')

print()
```

```
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
1
             1
1 2
           1 2
        1 2 3
1 2 3
123 1234
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

```
4
         5 5 5 5 5 5 5 5 5
          17.Full Star Pyramid
In [150...
          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 [144...
          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 [131...
          n=5
           for i in range(1, n+1):
               for j in range(i):
                   print('*',end=' ')
               print()
           for i in range(1, n + 1):
```

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

1 2 2 2

3

3

```
print()
         1 2
         1 2 3
         1 2 3 4
         1 2 3 4 5
          20. Right Aligned Pyramid Pattern
In [137...
          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
            12
           123
          1234
         12345
            **
  In [ ]:
```

print(j, end=' ')