

```
In [2]: n=5
for i in range(n):
    for j in range(n):
        print('*',end=" ")
    print()
```

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

```
In [3]: n=5
for i in range(n):
    for j in range(i+1):
        print('*',end=" ")
    print()
```

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

```
In [4]: n=5
for i in range(n):
    for j in range(i,n):
        print('*',end=" ")
    print()
```

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

```
In [7]: n=5
for i in range(n):
    for j in range(i+1):
        print(' ',end=" ")
    for j in range(i,n):
        print('*',end=" ")

    print()
```

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

```
In [9]: n=5
for i in range(n):
    for j in range(i,n):
        print(' ',end=" ")
    for j in range(i+1):
        print('*',end=" ")

    print()
```

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

```
In [10]: n=5
for i in range(n):
    for j in range(i+1):
        print(' ',end=" ")
    for j in range(i,n):
        print('*',end=" ")

    print()
```

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

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

    print()
```

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

```
In [22]: n=5
for i in range(n):
    for j in range(i,n):
        print(' ',end=" ")
    for j in range(i+1):
        print('*',end=" ")
    print()
for i in range(n):
    for j in range(i+1):
        print(' ',end=" ")
    for j in range(i,n):
        print('*',end=" ")

    print()
```

```

      *
    * *
  * * *
* * * *
* * * * *
* * * * *
* * * *
  * * *
    * *
      *

```

```
In [30]: n=7
stars=1
for line in range(n):
    for st in range(stars):
        print('*',end=' ')
    print()
    if line<n//2:
        stars+=1
    else:
        stars-=1
```

```

*
* *
* * *
* * * *
* * *
* *
*

```

```
In [32]: n=7
stars=1
spaces=n//2
for line in range(n):
    for sp in range(spaces):
        print(' ',end=" ")
    for st in range(stars):
        print('*',end=" ")
    print()
    if line<n//2:
        spaces-=1
        stars+=1
    else:
        spaces+=1
        stars-=1
```

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

```
In [41]: n=5
for line in range(1,n+1):
    for col in range(n):
        print(line,end=" ")
    print()
```

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

```
In [43]: n=5
for i in range(1,n+1):
    for j in range(n):
        print(i,end=" ")
    print()
```

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

```
In [45]: n=5
         for i in range(n,0,-1):
             for j in range(n):
                 print(i,end=" ")
             print()
```

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

```
In [48]: n=5
         for i in range(1,n+1):
             for j in range(i):
                 print(i,end=" ")
             print()
```

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

```
In [53]: n=5
         for i in range(n,0,-1):
             for j in range(i):
                 print(i,end=" ")
             print()
```

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

```
In [54]: for i in range(n,0,-1):
         for j in range(n-i+1):
             print(i,end=" ")
         print()
```

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

```
In [58]: n=5
         for i in range(1,n+1):
             for j in range(n-i+1):
                 print(i,end=" ")
             print()
```

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

```
In [ ]:
```