

Nested Loop

Loop inside another loop.

for i in range():

 for j in range():

 stmt of inner loop.

stmt of outer loop.

```
ON
    i=1
    while (i<=5):
        j=1
        while (j<=5):
            print(i,j)
            j=j+1
```

print() → it will go to next line without printing on the same line.

```
for i in range(5):
    for j in range(5):
        print(i,j)
```

print(end=" ") → it will give a space

btw each printing item. stays on the same line

\t → tab space

\n → next line.

outer loop controls the no. of rows

inner loop controls no. of columns

```

for i in range(5):
    → i in range(5) → 0, 1, 2, 3, 4
        for j in range(i+1):
            → when i=0 → j runs 1 → print *
            → when i=1 → j runs 2 → **
            → ...
            → when i=4 → j runs 5 → *****
    print()

```

if we write range(i) in for loop,

then i=0 → range(0) → prints 0 stars

so i+1 ensures at one star on next line:

end = " " → prints star on same line

print() → moves to next line

for i in range(5):

print('*' * (i+1))

OR

for i in range(1, 6):

print('*' * i).

OR

for i in range(5):

for j in range(i):

print('*', end=" ")