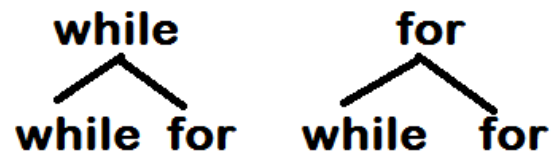


### Nested Loops:

**Nested Loops: writing Loop inside another loop**  
**while | for...loop**

**while with in a while**  
**for with in a while**



**while with in a for**  
**for with in a for**

**for o in range(1,3):**

```
for i in range(1,3):
....print("Sai")
print(" ")
```

Ex 2:

```
import time
for o in range(1,4):
    for i in range(1,5):
        time.sleep(.2)
        print("* ",end=' ')
print(" ")
```

```

if o=1
for i in range(1,o+1):
....print("*",end=' ')
if o=2
for i in range(1,o+1):
....print("*",end=' ')
if o=3
for i in range(1,o+1):
....print("* ",end=' ')
  
```

```

for o in range(1,4):
    for i in range(1,o+1):
        print("*",end=' ')
    print(" ")
  
```

o=1	*
o=2	* *
o=3	* * *

```

for o in range(1,4):
    for i in range(1,5):
        print(o)
    print(" ")
  
```

	1	2	3	4
o=1	1	1	1	1
o=2	2	2	2	2
o=3	3	3	3	3

```

for o in range(3,0,-1):
...for i in range(1,o+1):
....print("* ",end=' ')
print(" ")
  
```

```

o=3 * * *
o=2 * *
o=1 *
  
```

```
import time
```

```
n=int(input("Enter a number "))
```

```

for o in range(n,0,-1):
    for i in range(1,o+1):
        time.sleep(.1)
  
```

```
print("* ",end=' ')  
print(" ")
```

1. 2. 3. 4.

1 3 3 3 1  
1 2 2 2 1 \*  
1 2 3 1 3 3  
\* \* \* \* 1 \* 3  
3 3 3 1 \* 3 \*  
\* \* \* \* 1 \* 3 \* 5  
5 5 5 5 5

5. 6. 7. 8.

\* \* \* \* \* 1 2 3 00 01 02 \*  
4 4 4 4 4 5 6 10 11 12 \* \*  
\* \* \* 7 8 9 20 21 22 \* \* \*  
2 2  
\*

```
import time
```

```
n=int(input("Enter a number ")) #n=3  
for i in range(1,n+1):  
    time.sleep(.2)  
    for j in range(1,11):  
        time.sleep(.1)  
        print(i,"x ",j,"= ",i*j)  
    print("-----")
```