

Ex: for nested if

```
n = int(input())
```

```
if n >= 0:
```

```
    if n == 0:
```

```
        Print('0')
```

```
    else:
```

```
        Print('+ve')
```

```
else:
```

```
    Print('-ve')
```

* Loops

• Loops in Python are used to repeat a block of code multiple times until a certain condition is met.

1. for Loop

2. while Loop.

1. for Loop: used when you know how many times you want to repeat code.

• It iterates over list, string, range, tuple

Ex: for i in range(5):

```
    Print('Hello')
```

Hello

Hello

Hello

Hello

Hello.

1.1) For loop with range

1.2) For loop with sequence

Ex: name = 'vahan'

```
for i in enumerate(name):
```

```
    print(i)
```

```
    print(f'pos = {i[0]}, char = {i[1]}')
```

@ (p)

0 (v)

P = 0, char = v

(1, a)

P = 1, char = a

1.1) For loop with range

```
for i in range(1, 5, 1)
```

```
    print(f'i = {i}')
```

```
    print('Hi')
```

i = 1

Hi

i = 2

Hi

i = 3

Hi

i = 4

Hi

* Print no from 1-20

2) sum no 1-10

3) odd no 1-10

```
for i in range(1, 21):
```

```
    print(i)
```

```
for i in range(2, 11, 2)
```

```
    print(i)
```

```
for i in range(1, 11, 2)
```

```
    print(i)
```

* to print sum of 1-10, even, odd no sum

```
ts = 0
```

```
even sum = 0
```

```
odd sum = 0
```

```
for i in range(1, 11):
```

```
    ts = ts + i
```

```
    if i % 2 == 0
```

```
        even sum = even sum + i
```

```
    else
```

```
        odd sum = odd sum + i
```