

Loops in python:

- While
- For

While

- executes a block of code repeatedly while a condition is "True"

```
In [19]: enrolled_patients = 0
         target = 5

         while enrolled_patients < target:
             enrolled_patients += 1
             print ("patient enrolled successfully")

         print ("all patients enrolled successfully")
```

```
patient enrolled successfully
patient enrolled successfully
patient enrolled successfully
patient enrolled successfully
patient enrolled successfully
all patients enrolled successfully
```

```
In [21]: visit_number = 1

         while visit_number <=3:
             print ("reminder sent for visit")

             visit_number +=1
         print ("All visit reminders sent")
```

```
reminder sent for visit
reminder sent for visit
reminder sent for visit
All visit reminders sent
```

for loop:

- Used to iterate over a sequence (like a list, tuple or string)

```
In [3]: name = "Meera"
         for i in name:
             print(i)
```

```
M
e
e
r
a
```

```
In [4]: blood_pressure = [100, 101, 102, 103]
        for i in blood_pressure:
            print (i)
```

```
100
101
102
103
```

```
In [10]: range (0,5)
         for i in range(5):
             print (i)
```

```
0
1
2
3
4
```

```
In [12]: for i in range (5,20,5):
         print (i)
```

```
5
10
15
```

```
In [13]: for i in range (1,31):
         if i % 3 == 0:
             print(i)
```

```
3
6
9
12
15
18
21
24
27
30
```

```
In [14]: for i in range (1,51):
         if i % 5 == 0:
             print (i)
```

```
5
10
15
20
25
30
35
40
45
50
```

```
In [15]: n = 4
         for i in range (0,n):
             print (i)
```

0
1
2
3

```
In [16]: li = ["geeks", "for", "geeks"]
         for x in li:
             print(x)

         tup = ("geeks", "for", "geeks")
         for x in tup:
             print(x)

         s = "abc"
         for x in s:
             print(x)

         d = dict({'x':123, 'y':354})
         for x in d:
             print("%s %d" % (x, d[x]))

         set1 = {10, 30, 20}
         for x in set1:
             print(x),
```

geeks
for
geeks
geeks
for
geeks
a
b
c
x 123
y 354
10
20
30

BREAK, CONTINUE, PASS

```
In [28]: blood_pressures = [118, 125, 142, 130, 135]

         for bp in blood_pressures:
             if bp > 140:
                 print("Abnormal BP detected")
                 break
             print("BP Normal")
```

BP Normal
BP Normal
Abnormal BP detected

```
In [29]: patient_data = [98, None, 101, 99, None, 105]

         for temp in patient_data:
             if temp is None:
```

```
        continue
    print("Recorded temperature")
```

```
Recorded temperature
Recorded temperature
Recorded temperature
Recorded temperature
```

In []:

In []:

In [23]:

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

```
1
2
3
4
5
6
7
8
9
10
```

In []:

In []:

In []: