Loops in Python

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Definite (For Loops)

```python
In [3]:  for i in range(5):
             print(i)
```

```
0
1
2
3
4
```

```python
In [4]:  for i in range (10,1,-2):
             print(i)
```

```
10
8
6
4
2
```

```python
In [5]:  for i in range(15,165,15):
             print(i)
```

```
15
30
45
60
75
90
105
120
135
150
```

```python
In [6]:  for i in range (1,10):
             if (i%2==0):
                 print(i)
```

```
2
4
6
8
```

Indefinite loop (While loop)

```python
In [7]:  i = 1
         while i < 6:
             print("Love Python",i)
             i=i+1 # here we increment the value or we can also write i+=1
```

```
Love Python 1
Love Python 2
Love Python 3
Love Python 4
Love Python 5
```

```python
In [8]:  i = 5
         while i >= 1:
             print("Love Python",i)
             i-=1 #Here we decrement the value
```

```
Love Python 5
Love Python 4
Love Python 3
Love Python 2
Love Python 1
```

```python
In [9]:  while True:
             name=input("Enter the name: ")
             if name. isalpha():
                 print('name:',name)
                 break
             else:
                 print("Name can't be an integer")
                 continue
```

```
Enter the name: 123
Name can't be an integer
Enter the name: Sudhanshi123
Name can't be an integer
Enter the name: Sudhanshi
name: Sudhanshi
```

Nested while loop

```python
In [10]:  i=1
          j=2
          while i<6:
              while j<11:
                  print(i,",",j)
                  i+=1
                  j+=2
```

```
1 , 2
2 , 4
3 , 6
4 , 8
5 , 10
```

```python
In [11]:  i=1
          while i<3:
              print("Outer loop",i)
              i+=1
              j=1
              while j <=3:
                  print("Inner loop",j)
                  j+=1
          else:
              print("Loops ended Here")
```

```
Outer loop 1
Inner loop 1
Inner loop 2
Inner loop 3
Outer loop 2
Inner loop 1
Inner loop 2
Inner loop 3
Loops ended Here
```

```
In [ ]:
```