

for loop

```
In [1]: print(list(range(0,6))) #prints number between 0 -- 5, 6 is excluded  
[0, 1, 2, 3, 4, 5]
```

```
In [2]: print(list(range(0,6,2))) #step by 2  
[0, 2, 4]
```

```
In [3]: print(list(range(0,20,2)))  
[0, 2, 4, 6, 8, 10, 12, 14, 16, 18]
```

```
In [3]: # for var in sequence  
#       print(var)  
  
numList = list(range(1,11)) #program for printing first 10 numbers  
  
for i in numList:  
    print(i)
```

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

```
In [13]: numList = list(range(1,11)) #program for printing first 10 numbers

for i in numList:
    print(i, end="; ") #here end is not "\n" by default, we changes it to ";" after consulting documentation
```

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

```
In [15]: for a in "ARITRA":
    print(a, end="->")
```

A->R->I->T->R->A->

```
In [21]: list = [1,4,8,55]

for i in list:
    print(i)
```

1
4
8
55

loop control statement or keywords "break keyword"

```
In [25]: list = [1,3,45,66,77,33,55,88,9]

userInput = int(input("Please enter the number: "))

for i in list:
    if i == userInput:
        print("hey its there")
        break
    else:
        print("not in the list") #here else is inside of for so each time it will give the result till the value not found.

print("we are out of the loop")
```

```
Please enter the number: 9
not in the list
not in the list
not in the list
not in the list
not in the list
not in the list
not in the list
not in the list
hey its there
we are out of the loop
```

```
In [26]: list = [1,3,45,66,77,33,55,88,9]

userInput = int(input("Please enter the number: "))

for i in list:
    if i == userInput:
        print("hey its there")
        break
else:
    print("not in the list")           #else is outside of if so it will only run if number not found

print("we are out of the loop")
```

Please enter the number: 9
hey its there
we are out of the loop

```
In [27]: list = [1,3,45,66,77,33,55,88,9]

userInput = int(input("Please enter the number: "))

for i in list:
    if i == userInput:
        print("hey its there")
        break
else:
    print("not in the list")           #else is outside of if so it will only run if number not found

print("we are out of the loop")
```

Please enter the number: 9999999999999
not in the list
we are out of the loop

```
In [33]: for i in "ARITRA SARKAR":  
        if i == "T":      #this will check for the letter T in the string  
            break  
        print("The letters are: ", i)  
    else:  
        print("letter not found")
```

The letters are: A
The letters are: R
The letters are: I

```
In [36]: for i in "ARITRA SARKAR":  
        if i == "x":      #this will check for the letter x in the string  
            break  
        print("The letters are: ", i)  
    else:  
        print("letter not found")
```

The letters are: A
The letters are: R
The letters are: I
The letters are: T
The letters are: R
The letters are: A
The letters are: S
The letters are: A
The letters are: R
The letters are: K
The letters are: A
The letters are: R
letter not found

Continue keyword

```
In [39]: for i in "ARITRA SARKAR":  
        if i == "T":      #this will check for the letter T and continue without doing anything  
            continue  
        print("The letters are: ", i)  
    else:  
        print("letter not found")
```

The letters are: A
The letters are: R
The letters are: I
The letters are: R
The letters are: A
The letters are:
The letters are: S
The letters are: A
The letters are: R
The letters are: K
The letters are: A
The letters are: R
letter not found

```
In [40]: for i in "ARITRA SARKAR":  
        if i == "R":      #this will check for the letter R and continue without doing anything  
            continue  
        print("The letters are: ", i)  
    else:  
        print("letter not found")
```

The letters are: A
The letters are: I
The letters are: T
The letters are: A
The letters are:
The letters are: S
The letters are: A
The letters are: K
The letters are: A
letter not found

pass keyword

```
In [42]: for i in "ARITRA SARKAR":  
        if i == "X":  
            pass          #this will do nothing just pass it out  
        print("The letters are: ", i)  
    else:  
        print("letter not found")
```

```
The letters are: A  
The letters are: R  
The letters are: I  
The letters are: T  
The letters are: R  
The letters are: A  
The letters are:  
The letters are: S  
The letters are: A  
The letters are: R  
The letters are: K  
The letters are: A  
The letters are: R  
letter not found
```

```
In [ ]:
```