

For loop

```
In [1]: #Example of for loop in strings
a="elephant"
for i in a:
    print(i)
```

e
l
e
p
h
a
n
t

```
In [2]: #If we want elephant in same line horizontally?
a="elephant"
for i in a:
    print(i, end=' ')
```

e l e p h a n t

```
In [3]: #for loop in list
a=["Ram","Apple","Ant"]
for i in a:
    print(i)
```

Ram
Apple
Ant

```
In [14]: #Print first 10 even number
a=range(1,21)
for i in a:
    if i%2==0:
        print(i, end=' ')
```

2 4 6 8 10 12 14 16 18 20

```
In [17]: #OR
a=range(2,21,2)
for i in a:
    print(i)
```

2
4
6
8
10
12
14
16
18
20

```
In [18]: #for with else
a=[1,2,3,4]
for i in a:
    print(i)
else:
    print("No item left")
```

1
2
3
4
No item left

While loop

```
In [1]: #example of while loop
a=int(input("Please enter number: "))
while a<10:
    print("a is", a)
    a=a+1
```

Please enter number: 2
a is 2
a is 3
a is 4
a is 5
a is 6
a is 7
a is 8
a is 9

```
In [11]: #while loop with list
```

```
In [1]: #while loop with list
l=[1,2,3,4]
while l:
    print(l.pop())
```

4
3
2
1

Break statement

```
In [4]: for i in range(10):
        print(i)
        if i==6:
            break
        print("Thank you")
```

0
1
2
3
4
5
6
Thank you

Continue Statement

```
In [11]: for i in range(10):
        if i==6:
            continue
        print(i)
```

0
1
2
3
4
5
7
8
9

FLOW OF CONTROL (PRACTICE) Give example

1. Difference bewteen if and elif construct and else?

```
In [13]: a=input("please enter fruit of your choice -Apple, Orange, Grape : ")
if a=="Apple":
    print("You have selected", a)
elif a=="Orange":
    print(f'you have selected {a}')
else:
    print("You have selected %s"%(a))
```

please enter fruit of your choice -Apple, Orange, Grape : Grape
You have selected Grape

1. Give one example of range function

```
In [14]: a=range(1,20,1) #a is starting from 1, ending in 20 with step 1
print(a)
```

range(1, 20)

```
In [15]: #lets use for loop here to see every number
for i in a:
    print(i, end=" ")
```

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

In [12]:

In []: