

```
In [10]: #list, append
list=["Maths", "Physics", "Chemistry", "Computer"]
print(list)
list.append("History")
print(list)
print(list[0])
print(list[1])
print(list[-1])

['Maths', 'Physics', 'Chemistry', 'Computer']
['Maths', 'Physics', 'Chemistry', 'Computer', 'History']
Maths
Physics
History
```

```
In [16]: #insert, reverse, clear
list=["Maths", "Physics", "Chemistry", "Computer"]
print(list)
list.insert(3,"Geography")
print(list)
list.reverse()
print(list)
list.clear()
print(list)

['Maths', 'Physics', 'Chemistry', 'Computer']
['Maths', 'Physics', 'Chemistry', 'Geography', 'Computer']
['Computer', 'Geography', 'Chemistry', 'Physics', 'Maths']
[]
```

```
In [19]: #sort
list=["Maths", "Physics", "Chemistry", "Computer"]
print(list)
list.insert(3,"Geography")
print(list)
list.sort()
print(list)

['Maths', 'Physics', 'Chemistry', 'Computer']
['Maths', 'Physics', 'Chemistry', 'Geography', 'Computer']
['Chemistry', 'Computer', 'Geography', 'Maths', 'Physics']
```

```
In [43]: #pop
list=["Maths", "Physics", "Chemistry", "Computer"]
print(list)
sub=list.pop(2)
print(sub)
print(list)

['Maths', 'Physics', 'Chemistry', 'Computer']
Chemistry
['Maths', 'Physics', 'Computer']
```

```
In [41]: #len (length)
list=["Maths", "Physics", "Chemistry", "Computer"]
print(len(list))
```

```
In [39]: #count
list=["Maths", "Physics", "Chemistry", "Computer"]
print(list)
print(list.count("Maths"))
list.append("Maths")
print(list)
print("Maths",list.count("Maths"))

['Maths', 'Physics', 'Chemistry', 'Computer']
1
['Maths', 'Physics', 'Chemistry', 'Computer', 'Maths']
Maths 2
```

```
In [1]: i=1
while i<=25:
    print(i, "Arsh")
    if i==10:
        break
    i+=1
```

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

```
In [1]: i=1
while i<=25:
    if i==10:
        i+=1
        continue
    print(i, "Arsh")
    i+=1
```

```
1 Arsh
2 Arsh
3 Arsh
4 Arsh
5 Arsh
6 Arsh
7 Arsh
8 Arsh
9 Arsh
11 Arsh
12 Arsh
13 Arsh
14 Arsh
15 Arsh
16 Arsh
17 Arsh
18 Arsh
19 Arsh
20 Arsh
21 Arsh
22 Arsh
23 Arsh
24 Arsh
25 Arsh
```

```
In [52]: #for loop
        for i in range (1,26):
            print(i, "Arsh")
```

```
1 Arsh
2 Arsh
3 Arsh
4 Arsh
5 Arsh
6 Arsh
7 Arsh
8 Arsh
9 Arsh
10 Arsh
11 Arsh
12 Arsh
13 Arsh
14 Arsh
15 Arsh
16 Arsh
17 Arsh
18 Arsh
19 Arsh
20 Arsh
21 Arsh
22 Arsh
23 Arsh
24 Arsh
25 Arsh
```

```
In [59]: #break
for i in range (1,26):
    print(i, "Arsh")
    if i==14:
        print("Inside if, break is about to come.")
        break
print("Out of the loop.")
```

```
1 Arsh
2 Arsh
3 Arsh
4 Arsh
5 Arsh
6 Arsh
7 Arsh
8 Arsh
9 Arsh
10 Arsh
11 Arsh
12 Arsh
13 Arsh
14 Arsh
Inside if, break is about to come.
Out of the loop.
```

```
In [63]: #continue
for i in range (1,26):
    print(i, "Arsh")
    if i==14:
        print("Inside if, continue is about to come.")
        continue
    print(i, "Arsh")

print("Out of the loop.")
```

```
1 Arsh
2 Arsh
3 Arsh
4 Arsh
5 Arsh
6 Arsh
7 Arsh
8 Arsh
9 Arsh
10 Arsh
11 Arsh
12 Arsh
13 Arsh
14 Arsh
Inside if, continue is about to come.
15 Arsh
16 Arsh
17 Arsh
18 Arsh
19 Arsh
20 Arsh
21 Arsh
22 Arsh
23 Arsh
24 Arsh
25 Arsh
Out of the loop.
```

```
In [55]: sublist=["Maths", "Physics", "Chemistry", "Computer"]
print(sublist)
for x in sublist:
    print(x)
print(sublist)
```

```
['Maths', 'Physics', 'Chemistry', 'Computer']
Maths
Physics
Chemistry
Computer
['Maths', 'Physics', 'Chemistry', 'Computer']
```



```
In [7]: for i in range(0, 101):  
        if i%2==0:  
            print(i)
```

```
0  
2  
4  
6  
8  
10  
12  
14  
16  
18  
20  
22  
24  
26  
28  
30  
32  
34  
36  
38  
40  
42  
44  
46  
48  
50  
52  
54  
56  
58  
60  
62  
64  
66  
68  
70  
72
```

74
76
78
80
82
84
86
88
90
92
94
96
98
100



```
In [21]: ilist=[21, 101, 10, 34, 150, 5, 40, 80]
largest=ilist[0]
slargest=ilist[0]
print(largest)
for x in ilist:
    print(x, largest)
    if x>largest:
        slargest=largest
        largest=x
        print("INSIDE IF")
        print(x, largest)
print(largest, slargest)
```

```
21
21 21
101 21
INSIDE IF
101 101
10 101
34 101
150 101
INSIDE IF
150 150
5 150
40 150
80 150
150 101
```

```
In [23]: i=10  
while i>0:  
    print(i)  
    i-=1
```

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