

Today Topics

- Conditional statements
- Loops

Conditional statements

- if statement
- else
- elif (if-else)
- nested if

```
1 ### if statement  
2  
3 syntax: if condition:<br>  
4         - set of statements
```

In [1]:

```
1 n = 10  
2 if n == 10:  
3     print(n)
```

10

In [5]:

```
1 # check whether the given no is even no. or not  
2  
3 n = int(input())  
4 if n%2==0:  
5     print(n,"is Even")  
6
```

20

20 is Even

Else statement

if condition:

- set of statements

else:

- set of statements

```
In [7]: 1 n = int(input())
        2 if n%2==0:
        3     print(n,"is Even")
        4 else:
        5     print("NO")
```

25
NO

elif syntax

if condition:

- set of statements

elif condition:

- set of statements

elif condition:

- set of statements

else:(optional)

- set of conditions

```
In [20]: 1 n = int(input())
        2 if n==1:
        3     print("the no entered by the used is 1")
        4 elif n==2:      #or n ==4 or n==3:
        5     print("the no entered by the used is 2")
        6 elif n==3:
        7     print("the no entered by the used is 3")
        8 elif n==4:
        9     print("the no entered by the used is 4")
       10 elif n==5:
       11     print("no is not in the conditionals")
       12
```

10

```
1 ##### nested if
2
3 if condition:
4     - if condition:
5         - if condition:
6             -set of statements
7         - else:
8             - statements
9     - else:
10         - statements
11 else:
```

```
12 - statements
13
```

```
In [22]: 1 n = int(input())
2 if n == 10:
3     n = n+1
4     if n == 11:
5         print(n)
6 else:
7     print(n,"is no equal to 10")
```

```
100
100 is no equal to 10
```

```
In [25]: 1 ### Find the biggest number out of 3 numbers
2
3 n1 = int(input()) # 15
4 n2 = int(input()) # 8
5 n3 = int(input()) # 20
6 if n1 == n2 and n1 == n3:
7     print("all the numbers are equal")
8 else:
9     if n1 > n2 and n1 > n3:
10        print(n1, "is big")
11    elif n2 > n1 and n2 > n3:
12        print(n2, "is big")
13    else:
14        print(n3, "is big")
15
```

```
20
10
15
20 is big
```

```
In [27]: 1 L = [1,2,3,4,5]
2 for I in L: #1,2,3,4
3     if I == 4:
4         break
5     print(I)
6
```

```
1
2
3
```

```
In [37]: 1 l = [1,2,3,4,5]
2 for i in l: # 1,2,3,4,5
3     #print(i, end = " ")
4     if i == 4:
5         print("continue statment is exected")
6         continue
7     print(i)
```

...

```
In [45]: 1 l = [1,2,3,4,5]
2 for i in l: # 1,2,3,4,5
3     if i == 4:
4         print("pass statment is exected")
5         pass
6     print(i)
```

...

```
In [ ]: 1 #for i in range(1,10)
```

```
1 ##### While loop
2 syntax:
3 while condition:
4     - set condition
5     - increment/decrement
6
```

```
In [47]: 1 n = 2
2 while n<10:
3     print(n)
4     n+=1
5
```

...

```
In [48]: 1 n = 2
2 for i in range(n,10):
3     print(i)
```

...

```
In [1]: 1 n = int(input()) # 4>5
        2 c= 0
        3 while n>0 and n>c:
        4     name = input()
        5     age = int(input())
        6     c=c+1
        7     print(name)
        8     print(age)
```

```
3
sri
24
sri
24
lalitha
50
lalitha
50
apssdc
10
apssdc
10
lalitha
30
lalitha
30
```

```
In [ ]: 1
```