Conditional statements

- if
- elif
- else
- Nested if

In [1]:

```python
a,b = 10,20
if(a>b):
    print("a is greater than b")
else:
    print("a is less than b")
```

a is less than b

In [1]:

```python
a = int(input("enter a value = ")) # input() is used to read the values dynamically
b = int(input("enter b value = "))
c = int(input("enter c value = "))
if(a>b and a>c):
    print(a," is greater")
elif(b>a and b>c):              # elif is used in python as else if in c
    print(b," is greater")
elif(c>a and c>b):
    print(c," is greater")
```

enter a value = 34
enter b value = 22
enter c value = 11
34 is greater

In [7]:

```python
n1 = int(input("enter value = "))
r = n1 % 2
if(r == 0):
    print(n1," is even")
else:
    print(n1,"is odd")
```

enter value = 45
45 is odd

Nested if

In [13]:

```python
n = int(input("enter n value = "))
if(n == 12):
    if(n>6):
        print(n,"is greater than 6")
    if(n<6):
        print(n,"is less than 6")

else:
    print(n,"is not equal to 12")
```

```
enter n value = 12
12 is greater than 6
```

In [23]:

```python
n = int(input("enter a value: "))
if(n > 0):
    if(n % 2 == 0):
        print(n,"is even")
    if(n % 2 != 0):
        print(n,"is odd")
else:
    print(n,"is not positive")
```

```
enter a value: -56
-56 is not positive
```

Looping statements

- A for loop is used for iterating over a sequence(list,tuple,dictionary,a set,string)

In [25]:

```python
for i in range(5): # 0 to n-1 times iterated
    print(i)
```

```
0
1
2
3
4
```

In [28]:

```python
for i in range(1,5): # range(first value,last) here last one is not considered
    print(i)
```

```
1
2
3
4
```

In [29]:

```python
for i in range(1,10,2): # i value incremented by 2
    print(i)
```

1
3
5
7
9

In [34]:

```python
for i in range(2,11,2):
    print(i,end = " ") # for sidewise printing values
```

2 4 6 8 10

In [39]:

```python
for i in range(10,0,-1):
    print(i)
```

10
9
8
7
6
5
4
3
2
1

In [40]:

```python
for i in range(10,0,-2):
    print(i)
```

10
8
6
4
2

In [41]:

```python
for i in range(9,0,-2):
    print(i)
```

9
7
5
3
1

In [43]:

```python
i += 2
print(i)
```

4

In [44]:

```python
fruits = ["apple","grapes","lemon","orange"]
for j in fruits:
    print(j)

```

apple
grapes
lemon
orange

In [45]:

```python
list = [1,5,7,9,3,8]
for j in list:
    print(j)
```

1
5
7
9
3
8

In [ ]:

```python

```