Conditional Statement

Conditional statement in the programming is the way to check our program in particular condition and how to preform in that particular condition and if condition does not matches then what program have to do. This conditional statement help us in the categorizing of datas. There are some types of conditional statements are **if statement**, **if-else statement**, **if-elif-else statement** and **match statement**.

If Statement

In case of using **if statement** we only check one condition only. if that one condition is true then we perform some task otherwise nothing is happen. If statement just check the condition that is passed in the if statement if it is true then program runs only. First of all, we write the **if** keyword then write the condition after that use colon then come to next line and use indentation before writing print statement. Here, indentation is necessary below the ":" statements. Indentation means one tab or four space.

In [5]:
```
pendrive = 52
if(pendrive>50):
    print("I use it")
```

```
I use it
```

Shorthand of if statement

In [20]:
```
if(pendrive >= 45) : print("TRUE")
```

```
TRUE
```

If-Else Statement

In case of using **if-else statement** we check single statement but now we execute program when condition meets or condition return true but if condition does not meet or condition become false then we execute another program for that or printing some messages as you wish. First of all, we write the **if** keyword then write the condition we want to check and then colon and then write program in next line with indentation in the statement. After that go to next line and start with **else** keyword and then colon after that go to next line an write program for else statement with indentation.

In [15]:
```
hdd = 1000
if(hdd > 1000):
```

```
    print("I want to buy")
else:
    print("I dont want to buy")
```

```
I dont want to buy
```

Shorthand of if-else statement

In [18]:
```
print("TRUE") if (hdd == 1000) else print("FALSE")
```

```
TRUE
```

If-Elif-Else Statement

In case of using **if-elif-else** we check more than one condition and execute different programs for different conditions just like if first condition is true then if statement execute but if second or third condition is true then elif statement execute and atlast if no one condition meets then the program of else statement execute. First of all, we write **if** statement with condition then we write **elif** keyword and then write condition after that write colon then in next line write the program you want to execute when condition of **elif** statement returns true. The more the condition, the more the **elif** block use.

In [27]:
```
storage = 100
if(storage < 100):
    print("Mobile")
elif(storage == 100):
    print("Tablet")
else:
    print("Device")
```

```
Tablet
```

Shorthand of if-elif-else

In [35]:
```
print("TRUE_1") if (storage<100) else print("TRUE_2") if (storage==100) else p
```

```
TRUE_2
```

Match Statement

There is a very new concept in Python is Match Statement Concept which is just familiar with Switch Case statement in other programming language like C, C++, Java. Few years ago, there is no concept of switch case statement in python but now it is possible due to **match statement**. Now, in match statement we can check multiple conditions and perform code for multiple condition meet each. Here, case statement (1-5) check whether match statement returning their values or not just like here match statement return 5 then case with value 5 execute its code.

case _: this is a default case which we write in python like this.

In [41]:
```
count = 5
match count:
    case 1:
        print("ONE")
    case 2:
        print("TWO")
    case 3:
        print("THREE")
    case 4:
        print("FOUR")
    case 5:
        print("FIVE")
    case _:
        print("Nothing!")
```

```
FIVE
```