3. Decision Making Statements

Decision making statements are used when we have to pass a code through some conditions which is in a form of statement.
Now, these statements makes the decision on the basis of wether the code satisfies the condition or not.
That's why it is called Decision making statements.

3.1 If-Else statements

If statement is used to execute the code,if certain conditions are satisfied.

In [2]:
```
#for eg -(1 means there will be a rain, 0 means there wont be a rain.)
Rain=1
if(Rain==1):     # ':' in python we use indendation rather than brackets{}
    print("Leo can't play football")
```

```
Leo can't play football
```

And what if the condition is not satisfied?

In [3]:
```
#for eg -(1 means there will be a rain, 0 means there wont be a rain.)
Rain=0
if(Rain==1):
    print("Leo can't play football")
```

we still want to see an output rather than no output.
Hence, we can use Else statement for those codes which are not been approved by the condition.

In [5]:
```
#for eg -(1 means there will be a rain, 0 means there wont be a rain.)
Rain=0
if(Rain==1):
    print("Leo can't play football")
else:
    print("Leo can play football")
```

```
Leo can play football
```

3.2 Elif Statements

In [4]:
```
#for eg- we have to find the greatest number among (3,4,2)
if 3>4 and 3>2:                    #here we use AND operator so that the code has to pass th
rough both the condition.
    print("3 is greatest")
elif 4>3 and 4>2:
    print("4 is greatest")
else:
    print("2 is greatest")
```

```
4 is greatest
```

3.3 Nested If-Else Statement

Q) if the age of the user is less than 16, the program should print on the screen “You are not allowed to drive at the moment”.
if the age of the user is less than 18, the program should print on the screen “You are not allowed to vote at the moment”.
if the age of the user is less than 25, the program should print on the screen “You are not allowed to rent a car at the moment”.
if the age of the user is greater than or equal with 25, the program should print on the screen “You can do anything that is legal”.

In [2]:
```
age=16
if(age<16):
    print("You are not allowed to drive at the moment.")
else:
    if(age<18):
        print("You are not allowed to vote at the moment.")
    elif(age<25):
        print("You are not allowed to rent a car at the moment.")
    else:
        print("You can do anything that is legal.")
```

```
You are not allowed to vote at the moment.
```

In [3]:
```
#or we can also write like this..
age=25
if(age<16):
    print("You are not allowed to drive at the moment.")
else:
    if(age<18):
        print("You are not allowed to vote at the moment.")
    else:
        if(age<25):
            print("You are not allowed to rent a car at the moment.")
        else:
            print("You can do anything that is legal.")
```

```
You can do anything that is legal.
```