

# 1. Conditional Statement

## 1.1 If statement

The code blocks nested in if statement is executed when conditions under if statement is True. Usually, programmers put conditionally evaluated statement in True/False.

```
In [1]: if True:
        print('Conditional was True')
```

Conditional was True

## 1.2 Comparisons

- Equals : ==
- Not Equal : !=
- Greater than : >
- Less than : <
- Object Identity : is

The is comparison is used when we compare two objects in memory. The equal operator compare values of two object, and the identity object compare the id of each object.

## 1.3 Else statement

The code in else block is executed when conditions of if statement is False.

```
In [2]: language = "Java"

if language == "Python":
    print("Language is Python")
else:
    print("No match ")
```

No match

## 1.4 Elif statement

The elif keyword is used to eliminate the need for additional nesting levels.

## 1.5 Complex Conditional Statement

We can make more complex conditional statement using and, or, and not, called logical operator.

```
In [3]: user = 'Admin'
logged_in = False

if not logged_in:
    print("Please Log in")
else :
    print("Welcome!")
```

Please Log in

## 1.6 Values evaluated as True or False

- **True** : True, None zero of any numeric type, Any sequence with value
- **False** : False, 0, None, Any empty sequence, Any empty mapping