

## Module 4: Python Control Statements

### Selection Statements:

Python provides the following options for Selection Statement:

- ❑ **if statement**

**Syntax:**

if test expression:  
    statement(s)

- ❑ **if else statement**

**Syntax:**

if test expression:  
    statement(s) of if  
  
else:  
    statement(s) of else

- ❑ **if elif else statement**

**Syntax:**

if test expression:  
    statement(s) of if  
  
elif test expression:  
    statement(s) of elif  
  
else:  
    statement(s) of else

## Iteration Statements:

Python provides the following options for Iteration Statement:

- ❑ **while statement**

**Syntax:**

while test expression  
body of while

- ❑ **for statement**

**Syntax:**

for val in sequence:  
body of for

### **range():**

- ✓ It is a built-in function in Python for generating sequence of integers.

- ✓ Variations of range():

range(stop) → start = 0, step=1

range(start, stop) → step=1

range(start, stop, size)

- ✓ start is always inclusive and stop is always exclusive.

- ✓ To go forward step size should be positive and to go back step size should be negative.

- ✓ start, stop and step should be integers else we get TypeError

- ✓ step cannot be 0 else we get ValueError