



Outline for the Python Course for MBA Students– 11th August onwards

Stage 1

General problem solving concepts:

- Problem solving in everyday life.
- Types of problems.
- Problem solving with Computers.

Program Design Tools:

- Algorithms.
- Flowchart.

Basics of Python Programming:

- Features of Python.
- History and Future of python.

How to write and execute python program:

- What are Literal constants, Variables and Identifiers.
- Data Types in Python.
- Input Operations.
- Comments.
- Reserved Words.

Operators and Expressions:

- Introduction to Operators in Python.
- Simple programs operators.

Programs based on decision Control System:

- Selection / Conditional Branching Statements.
- If statement.
- if-else statement.
- Nested If.
- If – elif – else statements.

Programs based on basic Loop Structure / Iterative statements:

- While loop.
- For loop.
- Selecting appropriate loop.
- Nested Loop.
- Break, Continue , Pass and Else statements used with loops.

**Tuples:**

- Tuples are immutable.
- Operations on Tuples.

List:

- Lists are mutable.
- Operations on List.

Hour 6:**Dictionary:**

- What is Dictionary?
- Operations on Dictionary.

Set:

- What is Set?
- Operations on Set.

Stage II**Strings:**

- Concept of String.
- Strings are immutable.
- Various String Operations.

Concept of Array:

- How to create an array?
- Traversing of Array.
- Insertion of elements into the array.

Functions:

- Need for functions.
- Function definition.
- Function call.
- Variable Scope and Life Time.
- The Return statement.
- Additional Features of Functions.



Modules in Python:

- Introduction to Modules.
- The from ...import statement.
- Creating a module.
- Standard Library modules in Python.

Object oriented Programming:

- Features of Object Oriented Programming.
- Classes and Objects.
- Simple Programs based on Object oriented programming.

File Handling in Python:

- Types of Files.
- Opening and Closing a file.
- Reading from a File.
- Writing into the Files.

