

Advanced Learning of Python

Duration: 6 weeks

- ☆ Basics of Python Programming
 - ❖ Introduction
 - ❖ History
- ☆ Installation of Python and its Programming Environment
- ☆ Data Types, Variables – Mutable, Immutable
- ☆ Operators in python
- ☆ Conditional Statements
 - ❖ If, if-else, Nested if and if-else
- ☆ Looping Structures
 - ❖ For
 - ❖ While
 - ❖ Do-while
- ☆ Working with strings
- ☆ Sequence Data Types
 - ❖ List
 - ❖ Tuples
 - ❖ Dictionaries
- ☆ Data indexing and selection
- ☆ Functions in python programming
 - ❖ Modular programming and functions
 - ❖ Library functions
- ☆ Scope and modules
- ☆ File Processing
- ☆ Computation on Arrays
- ☆ Introduction to Numpy
 - ❖ Environment setup
 - ❖ NumPy NDAarray
 - ❖ NumPy Array Operations
- ☆ File processing
- ☆ Python OOPS concepts
- ☆ Graphical user interface for python programming
 - ❖ Tkinter
- ☆ Visualization with matplotlib
 - ❖ Simple line plot
 - ❖ Scatter plot
 - ❖ Density and contour plots
 - ❖ 3D plots
- ☆ Introduction to pandas
 - ❖ Pandas Environment setup
 - ❖ Panda objects
- ☆ Python SQLite