

Python Programming

- 1) Introduction
- 2) Basic Syntax
- 3) Working with Variables
- 4) Operators in Python
- 5) Decision making statements in Python
- 6) Iteration in python
- 7) Numbers
- 8) Strings and input
- 9) Data structure in python
 - a. List
 - b. Tuple
 - c. Dictionary
 - d. set
- 10) Date and time
- 11) Functions, scoping and abstraction
 - a. Lambda expressions
- 12) Modules and files
 - a. Standard modules – sys
 - b. Standard modules – math
 - c. Standard modules – time
 - d. dir function
- 13) Testing and Debugging
 - a. Black-Box testing
 - b. White-Box testing
 - c. Conducting Tests
- 14) Exceptions and assertions
- 15) Multithreading
- 16) Networking in Python
- 17) Class & Objects
- 18) Reg expressions
- 19) CGI programming
- 20) Database access
- 21) XML processing
- 22) Sending email
- 23) GUI programming using Tkinter,Turtle
- 24) NumPy for mathematical computing

Address: U-11, Athwa Arcade, near Jain Mandir, Opp. T. & T.V. School, Athwa gate, Surat.

- a. Introduction to arrays and matrices
 - b. Indexing of arrays, data types, broadcasting of array math
 - c. Standard deviation, conditional probability
 - d. Co-relation and covariance
- 25) SciPy for Scientific computing
- a. Introduction to Scipy and its functions
 - b. Building on top of Numpy, cluster, linalg, signal, optimize, integrate, subpackages
 - c. Scipy with Bayers theorem
- 26) Matplotlib for data visualization
- a. Plotting graph and chart
 - b. Various aspects of line, scatter, bar, histogram, 3D
 - c. API of Matplotlib, SubPlots
- 27) Quick look at
- a. **machine learning**
 - b. **Data Science**
 - c. **Pandas**
 - d. **Scikit**
 - e. **Hadoop**
 - f. **Apache Spark**