

Learn Python - Beginners



By : Naveen Aggarwal, Email : naveenaggarwal12@gmail.com

An Introduction to Python



- Introductory Remarks about Python
- A Brief History of Python
- How python is differ from other languages
- Python Versions
- Getting Started: Downloading and Installing
- Pycharm – Python IDE for Professional Developers
- How to execute Python program
- Writing your first program

Python Basics



- Python keywords and Identifiers
- Python statements
- Operators in Python
- Python indentation
- Comments in python
- Command line arguments
- Getting user input
- Exercise

Variables and Data Types



- Introduction
- Variables
- Data Types
- Numbers
- Strings
- Lists, Tuples and Dictionary
- Exercise

Decision Making and Loops



- Introduction
- Control Flow and Syntax
- The if Statement
- Python Operators
- The while Loop
- break and continue
- The for Loop
- Pass statement
- Exercise

Functions



- Introduction
- Calling a function
- Function arguments
- Built in functions
- Scope of variables
- Decorators
- Passing Functions to a Function
- Lambda
- Closures
- Exercise

Exception Handling



- Errors
- Run Time Errors
- Handling IO Exceptions
- Try.... except statement
- Raise
- Assert
- Exercise

Files and Directories



- Introduction
- Writing Data to a File
- Reading Data From a File
- Additional File Methods
- Working with files
- Working with Directories
- Exercise

Regular Expressions



- Introduction
- Match function
- Search function
- Grouping
- Matching at Beginning or End
- Match Objects
- Flags
- Exercise

Classes Objects



- Introduction of classes and objects
- Defining a class in Python
- Creating an object in Python
- Constructors in Python
- Deleting Attributes and Objects
- Python Inheritance
- Multiple Inheritance
- Operator Overloading
- Exercise