Python1

Python Basic

Python Basic

Python1 - Version: 3

🕐 8 days Course

Description:

This three-day instructor-led course provides students basic python techniques, built-in and user-defined types, using Object-Oriented programming, text processing and working with files

Python is now the most popular dynamic programming language and it gaining more and more fans. The course helps better understand python as dynamic, easy to use, powerful with relatively short development time

This course focused on hands-on teaching with a lot of practical examples and labs

Intended audience:

This course is intended for programmers, project managers, project designers, and engineers who are willing to include Python in their development toolset.

Prerequisites:

Experience in programming is helpful, preferably with knowledge of object-oriented concepts
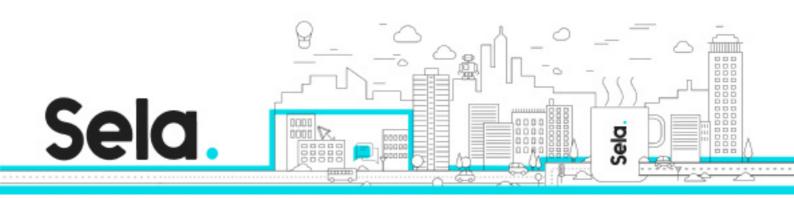
Knowledge of a dynamic language an advance

Objectives:

The participant will understand the language fundamentals

The participant will use different data types and expressions

The participant will use different types of statements

The participants will be able to write functions

The participant will be able to create and import modules

Topics:

python basic concepts

- What Python?
- Getting Python
- Python is interpreted language
- Python first program
- Indentations

basic types

- Primitives: bool and numeric
- Sequences: strings, lists, tuples, sets and dictionary
- Working with sequences:
    - º Operators
    - º Functions
    - º Comprehension
- Mutable vs Immutable in Python

python flow control

- Relational and Logical Operators
- If statement
- While loop
- For loop
- Loop Control Statements

functions and modules

- What is Function?
- Function Definition
- Function Arguments
- Local and Global Variables
- Pass by reference vs value
- Modules in Python
- Import Statement
- The from .. Import statement
- Locating Modules
- Useful built-in statements

python Object Oriented

- class definition
- constructors and built-in functions
- destructors and best practice
- static members
- Hide Implementation
- Class Inheritance
- Functions overriding

º Regular expressions

Files

- Reading
- Writing
- File manipulations

  º complex data structures

  º Summarizing lab