Programming in Python

Basics and Advanced

- VectorE Tech

Course Structure:

- 1. Introduction to Python
- 2. Basics
- 3. Data types
- 4. Operators
- 5. Flow/control statements
- 6. Loops
- 7. Functions

Course Structure:

- 1. Modules
- 2. Packages
- 3. Classes
- 4. OOPs concepts
- 5. Exception Handling
- 6. Decorators
- 7. Standard coding principles

Introduction to Python:

- 1. Why to use Python?
- 2. Is Python a scripting language?
- 3. What is python capable of, what can we do with Python?
- 4. What are Python's technical strengths?

Basics:

- Indentation
- Variables
- Comments
- Output variables

Data Types:

- Numeric Types
- Text Type
- Sequence Type
- Mapping Type
- Set Type
- Boolean Type
- Binary Type
- None Type

Operators:

- Arithmetic Operators
- Comparison Operators
- Assignment Operators
- Logical Operators
- Membership Operators
- Identity Operators
- Bitwise Operators

Flow/Control Statements:

- Conditions
- If Else
- Elif
- Break
- Continue
- Pass

Loops:

- While

- For
- Else

Sequence DataTypes:

- Creation
- Access
- Update
- Remove
- Looping
- Comprehension
- Built-in methods

Functions:

- Why use functions?
- Coding functions
- Arguments
- Types of functions
- Recursion
- Lamda
- DRY and KISS

Modules & Packages:

- Why use Modules?
- Coding basics
- Packages
- Industry standards
- DRY and KISS

Classes:

- What is a class?
- Why to use it?
- How to create one?
- Object creation
- Class and instance methods/variables
- Industry standards

OOPs concepts:

- What are OOPs concepts?
- Why they are required?
- Abstraction
- Encapsulation
- Polymorphism
- Inheritence
- SOLID
- Code better

Exception Handling:

- What is exception?
- Why are they so special?
- Why to handle them?
- Code better with exception handling

Any Questions?

Thank You !!!