PYTHON PROGRAMMING SCHEME OF WORK

INTRODUCTION

1. Overview of Python programming
2. Setting up the Python environment (Python installation, IDE setup like PyCharm or VSCode)
3. Introduction to basic programming concepts (variables, data types, operators)

Introductory Concepts

1. Concepts of Functions, Numbers and Variables
2. Concepts of Variables

Strings

1. Strings variables and string variables
2. String Concatenations
3. String Overwriting
4. String Method

LIST

1. Concepts of list
2. List indexing
3. Addition of list
4. Nested List
5. List Method

Tuples

1. Concepts of Tuple
2. Difference between list and tuples

Dictionary

1. Concepts of Dictionary
2. Indexing and overwriting Items in a dictionary
3. Dictionary Methods

Control Structures

1. Concepts of conditional statements
2. If, elif and else
3. Nested if
4. Conditional Statement Examples
5. Concepts of loops
6. For and while loop
7. Nested loops
8. Loops examples

Functions and Modules

1. Concepts of functions
2. Defining functions
3. Functions with arguments
4. Return Statements
5. Concepts of modules
6. Built in modules
7. Examples of functions

Exception Handling

1. Concepts of Exception
2. Common Exceptions
3. Exception Handling Syntax
4. Examples

Object-Oriented Programming

1. Concept of OOP
2. Creating Simple Class
3. Method and Properties
4. Class Inheritance
5. Method Overriding

Project