CODING CLUB

Python (96 HOURS)

CHAPTER 1 : INTRODUCTION

- Why Python?
- Data types and variables
- Strings
- Indexing and slicing with strings
- String properties and methods
- Print formatting

CHAPTER 2 : DATA STRUCTURES

- Lists
- Dictionaries
- Tuples
- Sets
- I/O with basic files in python
- Comparison operators

CHAPTER 3 : PYTHON STATEMENTS

- If elif and else statements
- While loops
- For loops
- List comprehensions

CHAPTER 4 : METHODS AND FUNCTIONS

- Def keyword
- Logic with python functions
- Tuple unpacking
- *args and **kwargs in python
- Lambda expressions, maps, and filter functions
- Nested statements and scope

PROJECTS TO BE DONE...

Create a form with accepting the user, validating the user and simple user interaction

Create a Magic 8 Ball game

Plagiarism Checker

Calculator using python

CHAPTER 5 : OBJECT ORIENTED PROGRAMMING

- Attributes and class
- Class object and methods
- Inheritance and polymorphism
- Magic and Dunder methods

CHAPTER 6 : MODULES, PACKAGES AND EXCEPTIONAL HANDLING

- pip install and PyPi
- __name__and"__main__"
- Errors and Exception Handling

CHAPTER 7 : DECORATORS AND GENERATORS

- Decorators with python
- Generators with python

CHAPTER 8 : ADVANCED PYTHON MODULES

- Collection module
- Datetime module
- Math and random module
- Regular expression
- Zipping and Unzipping files with python
- Timing your python code
- Debugger

CHAPTER 9 : WEB SCRAPING AND IMAGES WITH PYTHON

- Web scraping libraries
- Grabbing a title
- Grabbing a class
- Grabbing a image
- Working with images

CHAPTER 10 : WORKING WITH PDF's AND CSV FILES

- Working with CSV files
- Working with PDF files

CHAPTER 11 : EMAILS

- Sending emails in python
- Receiving emails