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PYTHON ROADMAP

Days 1-5: Introduction and Setup
1. Day 1-2: Introduction to Python
- Features of Python, its history, and its use cases.
- Explore the Python community and resources.
2. Day 3-5: Setting Up Your Environment
- Install Python on your system.
- Choose a code editor (VS Code, PyCharm, etc.) and install it.
- Write and execute your first Python script.

Days 6-10: Basics of Python
3. Day 6-7: Basic Syntax
- Learn about variables, data types, and basic operations.
- Understand the print() function and string manipulation.
4. Day 8-10: Control Flow and Functions
- Study if statements, loops (for and while), and how to use them.
- Dive into defining and calling functions.

Days 11-15: Data Structures
5. Day 11-12: Lists and Tuples
- Understand the concepts of lists and tuples.
- Learn about indexing, slicing, and common operations on these data structures.
6. Day 13-15: Dictionaries and Sets
- Explore dictionaries and sets in Python.
- Understand their use cases and common operations.

Days 16-20: Object-Oriented Programming (OOP)
7. Day 16-17: Classes and Objects
- Learn the basics of classes and objects.
- Understand attributes and methods.
8.Day 18-20: Inheritance, Encapsulation, and Polymorphism
- Dive into OOP concepts like inheritance, encapsulation, and polymorphism.

Days 21-25: File Handling and Modules
9.Day 21-22: Reading and Writing Files
- Learn how to open, read, and write to files in Python.
10.Day 23-25: Modules and Libraries
- Understand Python modules and import statements.
- Explore popular libraries (e.g., math, random) and how to use them.

Days 26-27: Web Development Basics
11.Day 26: Introduction to HTML and CSS
- Get a basic understanding of HTML and CSS for web development.
12.Day 27: Basic Web Scraping with BeautifulSoup
- Learn how to use BeautifulSoup to scrape information from web pages**.**

Days 28-30: Mini Project and Review
13. Day 28: Mini Project
- Work on a small project