**PYTHON ROADMAP**

**Days 1-5: Introduction and Setup**1. Day 1-2: Introduction to Python  
- Understand the basics 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

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| **2.** | Understand the basics of Python, its history, and its use cases. | **10-6-2024** |
| **3.** | Explore the Python community and resources. | **10-6-2024** |
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