Hours	Topics Covered	Activities	Outcomes
2	Overview of Programming Languages	- Introduction to Programming - Importance of Programming	- Understand the role and importance of programming languages - Gain awareness of different programming languages
2	Introduction to Python/Java	- Setting up Python/Java environment – Basic Syntax and Variables	- Set up a development environment for Python/Java - Learn basic syntax and variable usage in Python/Java
2	Data Types and Operators	- Hands-on exercises with numerical and string operations	- Understand different data types - Perform basic operations using operators
4	Control Flow (if statements, loops)	- Solve coding challenges involving control flow	- Write conditional statements and loops in Python/Java - Solve problems using control flow structures
3	Functions and Modularization	- Implement and call functions - Break down problems into functions	- Understand the concept of functions - Practice modularization in coding
3	Lists/Arrays and Data Structures	- Manipulate lists/arrays in Python/Java	- Learn about lists/arrays and their manipulation in Python/Java - Understand the basics of data structures
3	Input/Output and File Handling	- Read and write data from/to files – Handle user input/output	- Understand input/output operations - Learn file handling in Python/Java
4	Exception Handling and Debugging	- Implement exception handling - Debugging techniques	- Learn to handle exceptions in code - Use debugging tools to identify and fix errors
2	Introduction to Algorithms and Problem Solving	- Solve algorithmic problems	- Understand fundamental algorithms - Apply problem-solving techniques
2	Introduction to Data Structures and Algorithm Ana	- Solve coding challenges involving data structures and algorithms	- Learn about basic data structures - Analyze algorithmic complexity
7	Introduction to Object-Oriented Programming	- Implement classes and objects in Python/Java	- Understand the principles of object-oriented programming - Implement basic classes and objects
6	Advanced Topics (Optional based on pace and au	- Explore topics like multithreading, networking, etc. (based on audience interest)	- Introduce advanced programming concepts - Explore additional topics based on participant interest
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