Class	Contents
Class - 01	<ol> <li>Orientation Class</li> <li>Overview of Course Content and Related Topics</li> <li>Setting Up the Integrated Development Environment (IDE) and Installing Python</li> <li>Understanding the Assignment Submission Process</li> <li>Introduction of Programming Language</li> </ol>
Class - 02	<ol> <li>What is Python</li> <li>Python History and Versions</li> <li>Why Learn Python?</li> <li>Where is Python Used?</li> <li>Python Popular frameworks and Libraries</li> <li>How to run Python Code</li> <li>How does Python Work?</li> </ol>
Class - 03	Python Variable     Object Identity     Input and Output     Statement, Indentation, and Comment
Class - 04	<ol> <li>Introduction to Operators</li> <li>Operand vs Operators</li> <li>Arithmetic Operators</li> <li>Comparison Operators</li> <li>Assignment Operators</li> <li>Logical Operators</li> <li>Membership Operators</li> <li>Identity Operators</li> <li>Operator Precedence</li> <li>Ternary Operators</li> <li>Important Differences</li> <li>Mid Exam - 01 Discussion</li> </ol>
Class - 05	Introduction to Data Types     Strings
Class - 06	1. List
Class - 07	1. Tuples 2. Sets
Class - 08	<ol> <li>Dictionary</li> <li>Type checking and Typecasting</li> <li>Mid Exam - 02 Discussion</li> </ol>

Class - 09	Review Class
Class - 10	<ol> <li>if Statement</li> <li>ifelse Statement</li> <li>Nested if Statement</li> <li>ifelif Statement</li> <li>Shorthand if Statement</li> <li>Shorthand ifelse Statement</li> </ol>
Class - 11	Exercise on Conditional Statement
Class - 12, 13	1. Introduction While Loop
Class - 14	1. Introduction For Loop
Class - 15	<ol> <li>Exercise Loop Question</li> <li>Break, Continue, Pass, and else with For Loop</li> <li>Loop Exam Discussion</li> </ol>
Class - 16	<ol> <li>Introduction of Function</li> <li>Python Scope</li> </ol>
Class - 17	1. Introduction of Recursion
Class - 18	<ol> <li>Error Handling</li> <li>Discussion on Built-in Exceptions</li> </ol>
Class - 19	<ol> <li>Package and Module</li> <li>Built-in and User Define Package</li> </ol>
Class - 20	1. File – Open, Read, Write, Append
Level - 01	Final Exam and Viva

Class	Contents
Class - 01	<ol> <li>Introduction to Lambda Functions</li> <li>Use Cases of Lambda Functions</li> <li>Introduction to Comprehension</li> <li>List, Dictionary, and Set Comprehension</li> <li>Python Datetime/Date</li> <li>Python Math</li> <li>Python JSON</li> <li>Regular Expressions (RegEx)</li> <li>Magic Methods (Dunder)</li> </ol>
Class - 02	<ol> <li>Introduction to Iterators and Generators</li> <li>Use Cases of Iterators and Generators</li> <li>Decorators</li> <li>Excel File - Read, Write, Append, Arithmetic Operation</li> </ol>
Class - 03	<ol> <li>Understanding the Basics of OOP</li> <li>Key Concepts: Classes and Objects</li> <li>Attributes and Methods</li> </ol>
Class - 04	<ol> <li>Inheritance</li> <li>Polymorphism</li> </ol>
Class - 05	<ol> <li>Abstraction</li> <li>Encapsulation</li> <li>Best Practices in OOP</li> </ol>
Class - 06	<ol> <li>Introduction to Version Control</li> <li>Getting Started with Git</li> <li>GitHub and Git setup</li> </ol>
Class - 07	<ol> <li>Basic Git Command</li> <li>Git Best Practice</li> </ol>
Class - 08	<ol> <li>Package Managers: PIP, PyPI, Conda</li> <li>Testing Apps: Unittest/pyUnit, doctest, pytest</li> </ol>
Class - 09	Data-Structure and Algorithm: Important Sorting Algorithm
Class - 10	Data-Structure and Algorithm: Stack and Queue
Class - 11	Basic HTML and CSS
Class - 12	Introduction of Database and SQL Query - 1
Class - 13	Introduction of Database and SQL Query - 2

Class - 14	Introduction to Django     Setting Up the Development Environment     Django Project Structure
Class - 15	<ol> <li>Creating Your First Django App</li> <li>Django Models</li> <li>Django Admin Interface</li> </ol>
Class - 16	<ol> <li>Django Views</li> <li>Django Templates</li> <li>Django URLs and Routing</li> </ol>
Class - 17	Forms in Django     Working with Database and Django
Class - 18	<ol> <li>Project: Building a Simple Blog Application</li> <li>Final Project</li> </ol>
Class - 19	Review Class
Class - 20	Final Project Review and Career Talk
Level - 02	Final Exam and Viva