

Week 1: Introduction to Python

Module 1: Introduction to Python

Lecture 1: What is Python and its applications?

Lecture 2: Setting up Python environment

Lecture 3: Your First Python Program

Week 2: Python Basics

Module 2: Numbers, Strings, and Conversions

Lecture 4: Variables and Data Types

Lecture 5: Working with Numbers

Lecture 6: Working with Strings

Lecture 7: Type Conversion

Week 3: Dates, String Formatting, and Input

Module 3: Dates and String Formatting

Lecture 8: Working with Dates and Times

Lecture 9: String Formatting and F-Strings

Module 4: Input

Lecture 10: User Input (input() function)

Week 4: Operators and Control Flow

Module 5: Operators

Lecture 11: Arithmetic and Comparison Operators

Lecture 12: Logical Operators

Module 6: Conditional Statements

Lecture 13: if, elif, else Statements

Lecture 14: Nested Conditionals

Week 5: Loops and Data Structures (Part 1)

Module 7: Loops (while and for)

Lecture 15: while Loop

Lecture 16: for Loop

Module 8: Lists

Lecture 17: Introduction to Lists

Lecture 18: List Operations and Slicing

Week 6: Data Structures (Part 2)

Module 9: Sets and Tuples

Lecture 19: Sets and Set Operations

Lecture 20: Tuples

Module 10: Dictionaries

Lecture 21: Introduction to Dictionaries

Lecture 22: Dictionary Operations

Week 7: Functions and Modules

Module 11: Functions

Lecture 23: Defining Functions

Lecture 24: Function Parameters and Return Values

Module 12: Modules

Lecture 25: Importing and Using Modules

Week 8: Error Handling and File Handling

Module 13: Exception Handling

Lecture 26: Handling Exceptions (try, except)

Lecture 27: Custom Exceptions

Module 14: File Handling

Lecture 28: Reading and Writing Files

Week 9: Course Review and Final Projects

Module 15: Course Review

Lecture 29: Recap of Key Concepts

Module 16: Final Projects and Assignments

Lecture 30: Work on Mini Projects

Lecture 31: Q&A Session