⬜ Python Course - Day 001

📑 Introduction to Python

- What is Python?

  Python is a high-level, interpreted programming language known for its readability and simplicity. It is widely used for web development, data analysis, artificial intelligence, scientific computing, and more.

- History of Python

  Python was created by Guido van Rossum and first released in 1991. It was designed to prioritize code readability and simplicity, making it accessible to beginners and experts alike.

- Why Python is popular

  Python's popularity stems from its versatility, ease of learning, extensive libraries, and active community. It is used by companies like Google, Facebook, and NASA for various applications.

- Applications of Python

  Python is used in various domains, including web development, data science, machine learning, automation, and more. Its ability to integrate with other languages and tools makes it a preferred choice for many developers.

💻 Setting Up the Environment

- Installing Python
- Setting up a Python development environment
- Writing and running your first Python script

</> Basic Syntax and Operations

- Python syntax
- Variables and data types
- Basic operations (arithmetic, comparison, logical)

⟳ Control Structures

- Conditional statements (if, else, elif)
- Loops (for, while)

🔧 Functions

- Defining and calling functions
- Function parameters and return values

✏️ Hands-on Practice

- Writing simple Python programs
- Problem-solving exercises

◎ Learning Objectives

- Understand the history and applications of Python.
- Set up a Python development environment.
- Write and execute basic Python scripts.
- Use variables, data types, and basic operations in Python.
- Implement control structures to direct the flow of a program.
- Create and use functions to organize code.

📖 Additional Resources

- [Python Official Documentation](#)
- [Python for Beginners](#)
- [Codecademy: Learn Python](#)