Programming Skills - Python

Learn the basics of Python Programming

Day - 0

Introduction to Python

Agenda

0.1. Why Python?

Importance and use cases of Python, what makes it different from other languages.

0.2. Replit

Setting up a temporary development environment for the first week.

0.3. Using Python

Syntax basics, variables, and data types.

Before we begin

Let us remember what Linus Torvalds said on January 26th, 2024.

> "
>
> You copied that function without understanding why it does what it does, and as a result your code IS GARBAGE.

0.1. Why Python?

Why Python?

Beginner-friendly

It's simple syntax makes it easy to learn and read, making it a great first programming language for beginners.

Active Community

A huge community and abundant learning resources make problem-solving easier.

Wide Range of Applications

Used in web development, data science, machine learning, automation, and more.

Scalability

Can handle small scripts to complex systems, making it suitable for projects of any scale.

0.2. Replit

Why Replit?

Simpler to get started with. Python and IDE installation shall be done in the 2nd week.

0.3. Using Python

Syntax Basics

Before learning how to write Python code, you must learn how to read and understand it.

Syntax Basics

Indentation

Python uses indentation instead of braces to define scope.

Case-sensitive

Like most programming languages, Python is case-sensitive.

No semi-colons

End of a statement is identified by line-breaks. Semi-colons are not used.

Naming convention

Variables can contain letters, numbers, and underscores. But they cannot start with a number.

Variables & Datatypes

Variables are used to store information for later reference.

Datatypes are types of data supported by Python.

Variables & Datatypes

Example:

```
g = 10
```

Here, **g** is the variable and **10** is the data stored in it.

Since Python is a dynamically typed language, we don't have to declare the datatype of the variable.

Replit →

Q&A

Thank You!