**PYTHON VARIABLE**

1-Introduction to python 🡪

2-Variable in python 🡪

* a **variable** is a name that refers to a memory location where a value is stored.
* a variable is a container for data.

3-Charcteristic of variable 🡪

* **Dynamic Typing**: no need to declare any variable like (int, float, string)
* **No Explicit Declaration**: Just assign a value, and Python will automatically create the variable
* **Mutable**: You can change the value of a variable as many times as you need during the execution of your program

4- Rules to define variable in python 🡪

* **Must start with a letter (a-z, A-Z) or an underscore (\_)**.
* **Can contain letters, digits (0-9), and underscores**, but cannot start with a digit.
* **Case-sensitive**: age, Age, and AGE are different variables.
* **Cannot be a Python keyword** (e.g., True, False, if, for, class, etc.).

A screenshot of a computer code

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Final Notes:

* **Variables can store any type of data**, including numbers, strings, lists, dictionaries, objects, etc.
* **Variables are dynamic**, meaning their type is automatically determined by the value assigned to them, and they can change type during execution.