Introduction to Pointers

Variables are stored in specific locations in the computer's memory, and each of these locations has a unique address.

For example, when we declare a variable in our code like this:

int x = 5;

The computer puts the variable **x** in a specific location in memory and labels that location with a unique address.

Let's say the address for **x** is **0x1311**. If we look inside the memory location labeled **0x1311**, we will find our variable **x** with the value **5**.

We can even store these memory addresses in other variables to keep track of where our data is. This way, we can access the values stored in memory directly through these addresses.

So, in summary:

- Each variable is stored at a unique memory address.
- We can access the value of a variable by knowing its memory address.
- These memory addresses also can be stored in variables for easier access later.