### ****2. Types and Variables****

* **Types**:
  + In Java, a **type** defines the kind of data a variable can store. Common types include int, double, char, boolean, and more complex types like objects (classes).
  + **Example**:   
    int number = 10;
* **Variables**:
  + A **variable** is a named storage location that holds a value. The type of the variable defines what kind of data it can store.
  + **Example**:

String greeting = "Hello";   
// 'greeting' is a variable of type String

* **Relationship**:
  + A variable in Java has a specific type, and the type defines the operations that can be performed on that variable.
* **Difference**:
  + **Types** are abstract, representing possible values and behaviors, while **variables** are concrete instances that hold specific values of a particular type.