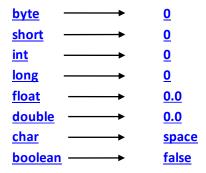**VARIABLE:**

The variable is the basic unit of storage or a container which holds the value in a Java Program.

When a variable is declared, the memory for that variable will be allocated. The amount of memory allocated to a variable will depend upon the data type that is specified.

Once the memory for that variable is allocated and if we do not specify any value to that variable, then the variable will automatically contain its default value.

byte ⟶	**0**
short ⟶	**0**
int ⟶	**0**
long ⟶	**0**
float ⟶	**0.0**
double ⟶	**0.0**
char ⟶	**space**
boolean ⟶	**false**

Syntax:
datatype variableName;
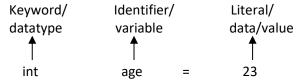datatype variable1, variable2, variable3, ….;

Declaration: The process of defining a variable

Initialization: The process of specifying a value to a variable for the first time is called initialization.

The value of a variable can be changed any number of times during the execution of the program.

Assignment: The process of specifying a value to a variable from the second time onwards or after the initialization is called assignment.

Identifier: Any name that is used for the purpose of identification is called identifier.

Keyword/ datatype	Identifier/ variable	Literal/ data/value
↑	↑	↑
int	age =	23

A variable is assigned with a data type.

Based on Memory location, Variable is of three types.

1. Local Variable.

Variable declared inside a method

This variable cannot be used outside the method where it is declared.

2. Instance Variable.

Variable declared outside the method but inside the class.

This variable can be used only within the class.

3. Static Variable.

A variable that is declared as static.

This variable can be shared across different instance or class.