What are variables in Java?

Basically variable is an <u>identifier</u>, behave like <u>container</u>, use to store values/data. The main purpose of variables in java to store **input** and **output** <u>values/data</u> of the java program.

<mark>Note:</mark> In java variable is an entity which value may change at the time of program execution. If we jump into deeply,

Variables consist of **declaration** and **initialization** parts, so what are these things,

<u>Variable Declaration:</u> Variable declaration means to allocation sufficient memory to the variable.

Syntax:

Data-Type Variable-Name;

Example:

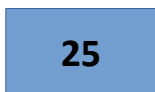int age;
String name;

age

From above Example <mark>int</mark> is **Data type** and <mark>age</mark> is **variable name**.

<u>Variable Initialization:</u> Variable initialization means to store some value in that particular memory location or variable.

Variable-Name = value; //initialization

Example:

int age; //declaration part
age = 25; //initialization part

25

age

There are <u>two types</u> of variables there in Java,

1. Method-Level variables:

The variables which is declare inside the methods are called **local variables**.

Scope of local variable will be inside method body only.

2. Class-Level variables:

The variables which is declare inside the class are called **class-level variables**. Those are

Instance/Object/Non-static variables and **Class/Static variables.**

<u>Rules to declare variables</u>:

1. Always variable declaration starts with lowercase letters.
2. variable declaration should not starts with digits(0-9) and special characters(like @, #, %, &, _,….etc).
3. White spaces are not allowed in between two words variable declaration

Example: String first name = "Ajay";//Wrong
            String firstName = "Ajay";//Right

Note: $ and _ special characters will support to declare variable but we will not use to declare java variables(because This is in contrast to other <u>coding conventions</u>.)