

## Data Types in Java:

Data types are identifiers, use to specify the different sizes, and their default values that can be stored in the variables.

In java data types could be categorized into three types,

**1. Primitive/fundamentals data types:** These type of data types can store only **one value** in a **variable**. But unable to store multiple values in a variable.

Example: int, boolean, char, double, etc...

Again these types are divided into four types:

- **integer type family**

1. byte
2. short
3. int
4. long

- **floating point family**

1. float
2. double

- **character type family**

1. char

- **boolean type family**

1. boolean

Data types and their respected sizes and default values:

Data Type	Default Value	Size
boolean	false	1 bit
char	'\u0000'	2 bytes
byte	0	1 byte
short	0	2 bytes
int	0	4 bytes
long	0L	8 bytes
float	0.0f	4 bytes
double	0.0d	8 bytes

**Note:** 1 byte = 8 bites

**2. Derived data types:** these type of data types can store **more than one value** of similar type in single **variable**, but unable store **dissimilar/heterogeneous** type of values in a variable.

Example: arrays and strings

**3. User defined data types:** These type of data types can store more than one value in single variable of **similar/dissimilar** and **homogeneous/heterogeneous** type values in a variable.

Example: class