

The **8 primitive data types in Java** are:

Data Type	Size	Used For	Example
<code>byte</code>	8 bits / 1 byte	Small whole numbers	<code>byte age = 25;</code>
<code>short</code>	16 bits / 2 bytes	Whole numbers	<code>short count = 3000;</code>
<code>int</code>	32 bits / 4 bytes	Whole numbers	<code>int score = 100;</code>
<code>long</code>	64 bits / 8 bytes	Very large whole numbers	<code>long population = 8000000000L;</code>
<code>float</code>	32 bits / 4 bytes	Decimal numbers	<code>float price = 19.99f;</code>
<code>double</code>	64 bits / 8 bytes	More precise decimal numbers	<code>double pi = 3.14159;</code>
<code>char</code>	16 bits / 2 bytes	A single character	<code>char grade = 'A';</code>
<code>boolean</code>	JVM-dependent*	<code>true</code> or <code>false</code>	<code>boolean passed = true;</code>

* Java defines `boolean` as `true` or `false`, but does **not specify an exact storage size** for it.

An easy way to group them:

Whole numbers: `byte`, `short`, `int`, `long`

Decimals: `float`, `double`

Character: `char`

True/False: `boolean`