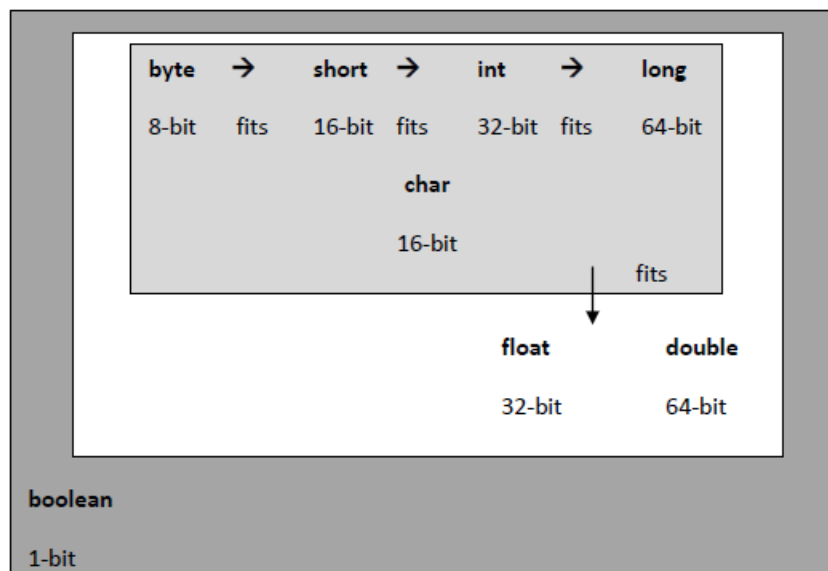


JAVA Notes 2 – Type Casting

When you assign value of one data type to another, the two types might not be compatible with each other. If the data types are compatible, then Java will perform the conversion automatically. If the data types are not compatible, then they need to be type casted i.e. converted. For example, assigning an int value to a long variable.

In other words, TYPE CASTINGS is when you FORCE a data type (variable) to how you want it. It is important to note that during type casting some data may be lost.



| Can be promoted | | | | | |
|-----------------|-------|-----|------|-------|----------|
| double | | | | | - none - |
| float | | | | | double |
| long | | | | float | double |
| int | | | long | float | double |
| char | | int | long | float | double |
| short | | int | long | float | double |
| byte | short | int | long | float | double |
| boolean | | | | | - none - |

Examples:

1. `Int c = (int) 2.53; //2.53 is a double and so 2.53 will be truncated i.e. 2 is placed in c`
2. `Double c = 2.53;`
`int j = (int) c; // This will work too.`
3. `boolean a = true;`
`int b = int(a); //Not compatible and won't work – gives error.`