

# Type Casting

---

This is simply casting one type to another or more simply converting one type to another.

Type casting works in two ways in java, one is the auto type casting and the other is manually type casting from one data type to another.

According to [https://www.w3schools.com/java/java\\_type\\_casting.asp](https://www.w3schools.com/java/java_type_casting.asp) The auto type casting works in this way:

- When we convert a smaller type to a larger type size:

**byte -> short -> char -> int -> long -> float -> double** This is also called **widening** or **implicit conversion** or **coercion**.

```
int iVal = 1000;
double doubleVal = a;
long longVal = a;

System.out.println(iVal);
System.out.println(doubleVal);
System.out.println(longVal);
```

- When we convert a larger type to a smaller type size. we need to do this explicitly so this is also known as **Narrowing or Casting or explicit conversion**.

**double -> float -> long -> int -> char -> short -> byte**.

```
double val = 100.324243;
int intVal = val;
long longVal = val;

System.out.println(val);
System.out.println(intVal);
System.out.println(longVal);
```