

# Casting

## Widening Casting

Converting a smaller type to a larger type size

`byte` -> `short` -> `char` -> `int` -> `long` -> `float` -> `double`

Widening casting is done **automatically** when passing a smaller size type to a larger one.

## Narrowing Casting (Manual)

Converting a larger type to a smaller size type

`double` -> `float` -> `long` -> `int` -> `char` -> `short` -> `byte`

Narrowing casting must be done **manually** by placing the type in parentheses in front of the value:

```
public class Main {
    public static void main(String[] args) {
        double myDouble = 9.78d;
        int myInt = (int) myDouble; // Manual casting: double to int
        System.out.println(myInt);    // Outputs 9
    }
}
```