Java Type Casting

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| Typecasting in Java is the process of converting one data type to another data type using the casting operator. When you assign a value from one primitive data type to another type, this is known as type casting. To enable the use of a variable in a specific manner, this method requires explicitly instructing the Java compiler to treat a variable of one data type as a variable of another data type. |
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| Types of Type Casting   1. Widening (automatically)Type Casting 2. Narrow(manually) Type Casting |
| **Widening Type Casting (automatically)** - converting a smaller type to a larger type size byte -> short -> char -> int -> long -> float -> double  Syntax :  larger\_data\_type variable\_name = smaller\_data\_type\_variable;   |  | | --- | | public class Main {  public static void main(String[] args) {  int myInt = 9;  double myDouble = myInt; **// Automatic casting: int to double**  System.out.println(myInt);  System.out.println(myDouble);  }  } | | Output  9  9.0 | |
| **Narrowing Type Casting (manually) -** converting a larger type to a smaller size type double -> float -> long -> int -> char -> short -> byte  smaller\_data\_type variable\_name = (smaller\_data\_type) larger\_data\_type\_variable;   |  | | --- | | public class Main {  public static void main(String[] args) {  double myDouble = 9.78d;  int myInt = (int) myDouble; **// Explicit casting: double to int**  System.out.println(myDouble);  System.out.println(myInt);  }  } | | **9.78**  **9** | |