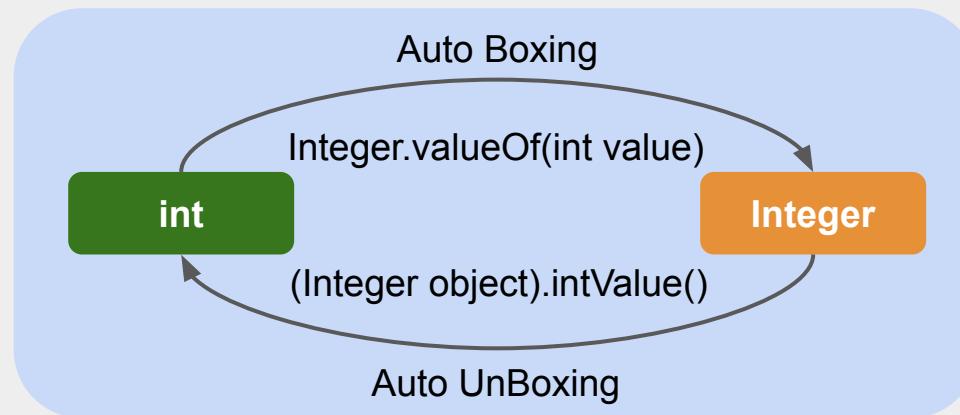


# Autoboxing and Unboxing

# Auto Boxing and Auto UnBoxing

Autoboxing is the automatic conversion that the Java compiler makes between the primitive types and their corresponding object wrapper classes. For example, converting an int to an Integer, a double to a Double, and so on. If the conversion goes the other way, this is called unboxing.



# What is Narrowing and Widening

Narrowing refers to passing a higher size data type like int to a lower size data type like short. It may lead to data loss. Casting is required for narrowing conversion.

Widening – Converting a lower datatype to a higher data type is known as widening. In this case the casting/conversion is done automatically therefore, it is known as implicit type casting. In this case both data types should be compatible with each other.

## Narrowing Type Casting

---

double

float

long

int

short

byte

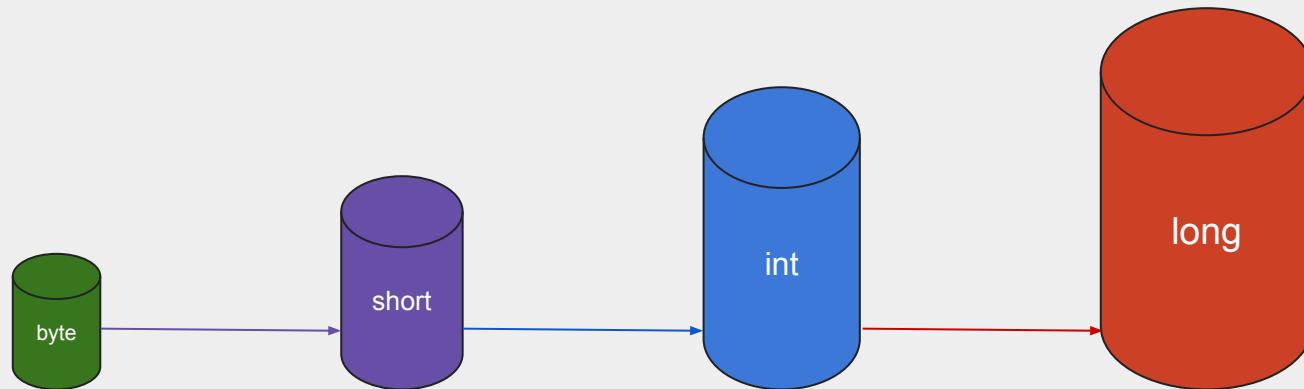
---

## Widening Type Casting

# Casts

- Widening Casting (automatically) - converting a smaller type to a larger type size

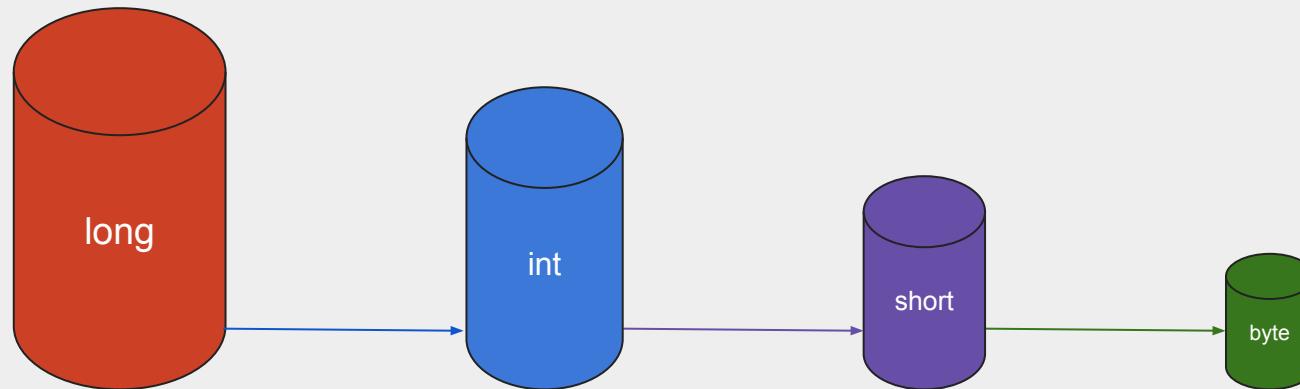
`byte -> short -> char -> int -> long -> float -> double`



# Casts

- Narrowing Casting (manually) - converting a larger type to a smaller size type

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



## Interview Questions