



# Primitive Data Types

▼ Class

Computer Science

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## Integers

**Byte** → 8 bits

- Shortest type of data

**Short** → 16 bits

**Int** → 32 bits

**Long** → 64 bits (25L, 303928289L, etc.)

**Char** → 16 bits ('A', 'B', etc.)

## Floating Point Numbers

**Float** → decimal (2.5F, 3.222F, etc.)

**Double** → also decimals

## Boolean Expressions

**Boolean** → 8 bits

- Only uses the last bit

If you exceed the limit of a data type, it will fold back over to the other side.

- **Limit of a Data Type:**  $[-2^x, 2^x - 1]$ 
  - $x \rightarrow \# \text{ of bits}$