**CS 333 Programming Languages**

**Types**
- Statically typed: specified at compile time
- Dynamically typed: specified at run time
- Type error
  - strongly typed: Java, Ada
  - not strongly typed: C, C++

**Basic Types**
- Integer data types: natural internal representation, platform and compiler dependent if there is no specific integer format definition
- Floating data types: IEEE 754 standard, portable

**Formats**
- Java defines data type sizes explicitly
- C and Python are not.

**Conversions**
- Type casting
- Implicit conversions