**Variable Concepts**

* Five concepts devoted to variables:
  + Declare, define, initialize, assign, input
* Declaration: associate name with a type
  + extern int x; //type of x is int
  + Variables must be declared to compile
* Definition: reserve space for an object or code
  + int y; // a defining declaration(both)
* Initialization: provide initial value for object
* Assignment: copy new value into object
* Input: a special form of assignment

**Literals and Modifiers**

Suffixes

L - long

LL long long

F - float

U - unsigned

Cout << “sizeof(7)->” << sizeof(7) << endl; //4 bytes

Cout << “sizeof(7L)->” << sizeof(7L) << endl; //4

Cout << “sizeof(7LL)->” << sizeof(7LL) << endl; //8

Cout << “sizeof(7.0F)->” << sizeof(7.0F) << endl; //4

Cout << “sizeof(7.0)->” << sizeof(7.0) << endl; //dunno

Cout << “sizeof(7.0L)->” << sizeof(7.0L) << endl; //dunno, 12?