**CS 202 Notes**

**8/28/18**

C++ **Classes** are very similar to c structs, in that they both include user-defined sets of data items, which collectively describe some entity such as a Student, a Book, and Airplane or a data construct such as a String, a ComplexNumber, etc.

A class is a defined data type containing:

* An object
  + Is a particular instance of a class

Standalone Compile

* *g++ -Wall -03 –std=c++11 –o prog1 prog1.cpp*

Compile Objects & Link

* *g++ -Wall -03 –std=c++11 –****c******prog1.o*** *prog1.cpp*
* *g++ -Wall -03 –std=c++11 –****c prog12 prog1.o prog2.o***

Linking(to external libraries)

* *g++ -Wall -03 –std=c++11 –o prog1 prog1.cpp* ***-lm***
* *g++ -Wall -03 –std=c++11 –o prog12 prog1.o prog2.o* ***–lm***

Running under Linux:

* ***./prog1***

Int main() {} \*There are no void returns in C++)

cout & cin (Console input and Console Output) \*Similar to printf and scanf from c

Intialize variables”

Int myValue; XXX

Int myValue = 0; OOO