

CSCI 15 Lab #7 – Simple inheritance, due 11/13/18

Create a class `Employee` to represent an employee of a company. The `Employee` class should keep the following information in member variables: employee name, employee number and hire date. Write appropriate constructors, accessor and mutator methods/functions for the class.

Next, write a class `ProductionWorker` derived from `Employee`. Add member variables to hold the shift (an integer, day is 0, swing (evening) is 1 and graveyard (night) is 2) and hourly pay rate (a double). Write appropriate constructors, accessor and mutator methods/functions for the class.

Make sure the derived class has access to members inherited from the base class, and uses the base class methods or functions as appropriate.

Demonstrate the classes work correctly with a simple client that declares a couple of `Employee` and `ProductionWorker` objects, and then manipulates them and prints their values.

A part of this lab is deciding the appropriate behavior of the classes. Therefore, before you try to write any code, decide on the interface to the classes – you should be able to read the object's value from an input stream in a fixed format, print it to an output stream in a fixed format, pass values through the derived constructor and `setAll()` method into the base class' data members, etc. Let me see your interface before you write the code for this.

You will have five code files, the `.h` and `.cpp` for `Employee`, the `.h` and `.cpp` for `ProductionWorker` and the `.cpp` for the client. The `.cpp` files will go into a project.