Name:

Develop your solution in the directory:

**/data/courses/ece\_1111/current/quizzes/qu\_10/lastname\_firstname/p01**

Create a C++ class that sorts lines in a file in lexical order. The class name should be **MySort** and should include the following:

1. A header file, **mysort.h**, that contains your class definition.
2. The class should have a protected internal data element, “**char\* fname\_d**”, that will hold a copy of the filename passed to the load method.
3. The class should have a protected static integer, “**static long debug\_level\_d**”, that is set to -1 initially.
4. A constructor that initializes all class data.
5. A destructor that “cleans up” allocated memory.
6. A method named “**load**”:

**bool MySort::load(char\* fname);**

that opens the file passed as an argument, and reads the content of the file line by line into an array. This method must be stored in a file **p01\_00.cc**. It cannot be implemented in the header file.

1. A method named “**sort**” that sorts the array holding the contents of the file.
2. A method named “**print**”:

**bool MySort::print(FILE\* fp);**

that prints the values in your array.

1. A method named **set\_debug\_level** that sets the variable **debug\_level\_d**:

**bool MySort::set\_debug\_level(long value);**

This method must be stored in a file **p01\_00.cc**. It cannot be implemented in the header file.

1. A driver program, **p01.cc**, that accepts a filename from the command line and passes it to your method that prints the sorted file.
2. In your driver program, you should demonstrate that setting **debug\_level\_d** in one object changes the value for all instances of the class M**ySort**.
3. A **Makefile** and header file, **p01.h**, that follow our usual conventions. I should be able to build your code by typing “make” and clean up your code by typing “make clean”.

**NOTE THAT FILES THAT ARE INCORRECTLY NAMED WILL RESULT IN A GRADE OF 0.** My testing script looks specifically for **p01.exe**.