

Department of Computer Science and Engineering  
University of Notre Dame

CSE 232 - Advanced Programming  
Fall 2004

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**Assignment 5**

**Reading:**

Read the rest of chapter 3 of the textbook. Review all class notes.

It is again recommended that you read the summary at the end of each chapter, and that you do the self-review exercises.

**Problem 1:**

Write a program somewhat similar to what is asked for in Exercise 2.19 p. 158, but with very different rules for input and output. For input, the program should get its data from a data file, which you'll find in `<classdir>/data/employees.dat` (where `<classdir>` stands for the class directory). Copy that file to your afs space. The file consists of three columns, which are, respectively, the employee id, the number of hours, and the hourly rate (the last row consists of sentinel values). Use input redirection to read in the data.

For output, the program should generate a table with two columns: the employee id, and the employee's pay; it should then also display the total pay and the average pay. All dollar values should be formatted to two decimals (see pages 111-113 for some help on C++ formatting; for advanced formatting - though not needed for this assignment - you may refer to section 12.7). Refer to the class discussion for an idea of what the output should look like.

**Problem 2:**

Redo problem 2 of assignment 4, but divide your code into separate files:

- a main file (driver): `hw5_2.cpp`
- a functions file: `hw5_2_func.cpp`
- a header file: `hw5_2_func.h`

Make sure the above files produce a working executable. Refer to the class discussion.

**Due date:**

Thursday 9 / 23 / 04, at 10 pm.

Make sure all your programs contain your name in the comment section. You must place the source codes for the two programs in your personal dropbox, under the `hw5` directory. Do not submit any executables. Use the same file naming convention as in previous homeworks, and follow the homework guidelines posted on the web. Make sure you use the `g++` compiler.