CS 2124 Data Structures

Project 0

In this project we will maintain an array that contains information about a list of employees. The main purpose of this project is to serve as a basic C-review as well as show you how the inputs for our projects will be formatted (reading from a file where each line of the file contains one “input” or “command”). Note that we give you a sample input file to work with and test your code, but your code should be written generally enough to handle other input files that have the same formatting (different number of employees, different names, etc.).

**Files provided in the project:**

1. Project0.h. The file now only contains a comment. You need to an Employee struct in this file. The struct should contain 3 variables.
   1. A C-string for the name. You can assume that no name is more than 9 characters long, so this can be a character array of size 10 (to account for the null character).
   2. An integer for the ID. Each ID is a 6-digit number.
   3. A double for the Employee’s hourly rate.
2. abc123Project0.c. Rename this file to your abc123. This file includes Project0.h, stdlib.h, and stdio.h contains a main() function with comments for what you need to implement.
3. Makefile. Update the makefile to reflect your abc123. You can implement your code however you like, however before submitting ensure your project compiles on the fox servers using this makefile. If it does not compile using the makefile then you will get 0 points! You can compile using the command*make* and you can execute your program using *./project0*.
4. Project0Input.txt. The first line of the file denotes the number of employees. In the sample input this number is 28. Each employee’s information is listed on a single line in the following format: “name ID HourlyRate”. Again, when we test your code we will be using a different file than this one, but it will still be in this same format.

**Submitting:**

Please submit to the blackboard dropbox a zipped folder containing all the files for the program (we should be able to download your zip file, extract the files, run your makefile, and execute your program).