

Program #5 – Ref Params & Files (Payroll)
CSC135 – Fall 2016

You are to rewrite program #4 (Payroll program). To begin, you can copy program #4 to program #5. To do this, assuming you named program #4 *payroll.cpp*, you would do the following:

```
cp payroll.cpp payroll2.cpp
```

Now edit payroll2.cpp for program #5.

You will rewrite this program to use reference parameters and files. Do the following:

- You must add a function to your program that will ask the user for the name of the data file. The function will then attempt to open the file. If the open fails, the program should report this fact and quit.
- Combine the functions that read the name and rate into one function. This function will read both values and return them using reference parameters. The function should read from the data file.
- Change the function that reads and sums the hours so that the hours are now read from the file.
- There is no longer a sentinel of “done” for employees. The program should now process data until it reaches the end of the file.

Each employee is associated with seven lines in the data file. The first line contains the employee name, the second line the employee rate. The next 5 lines contain each hours worked on each of the five days. A data file can be copied from my public directory using the following command:

```
cp /export/home/public/frye/csc135/payroll.dat payroll.dat
```

All output should be neatly labeled columns with money looking like money. The output should also include a summary at the bottom, which will contain the average number of hours worked by all employees, the total gross pay, the total withholding amount, and the total net pay for all employees.

As always the main program should basically be calls to functions that do that job. No global variables may be used. Information must be passed in functions.