**BCS 345 Lab – Scanner and File I/O**

***Overview***

Write code that performs input/output operations to/from the console and to/from a file.

***Part 1***

Write a program that will do the following:

1. Read in two numbers from the user.
2. Multiply those numbers together.
3. Print out the result.

Note: Use a formatted string to show the result.

***Part 2***

Modify the first lab program so that it writes the result to a file instead of the screen.

***Part 3***

Read data from a file and print it on screen (reading from a file on the next few slides). Make sure you create a column header for each column. The input file format is as follows:

1st column – name (string)

2nd column – age (int)

3rd column – hourly pay rate (double)

4th column – hours worked (int)

Download the “SalaryData.dat” file from Angel.

***Part 4***

Modify your program from part 3 so that it writes data to a file instead of the screen.

***Part 5***

Modify the report from part 4. Add a new column to the report called “Final Pay”. This column should be the result of multiplying the pay rate times the hours worked.

***Part 6***

Modify the report from part 5. Add a total row at the bottom of the report. The only column that should be totaled is the “Final Pay” column.

***Part 7***

Modify the report from part 6. Add a new column to the report called “Final Pay”. This column should be the result of multiplying the pay rate times the hours worked.