**Bucks County Community College**

**Department of Science, Technology, Engineering & Mathematics (STEM)**

**CISC122 Computer Science II**

LAB02:Files Points: 25

**OBJECTIVE**

* To demonstrate using input and output files
* To demonstrate proper report formatting and spacing
* To demonstrate summary totals

**REQUIRED**

A report of your work, in a flat pocket folder, in the following order:

1. Grade form **Lab02GradeForm.doc**

2. This program description **Lab02LabDescription.doc**

Listing of test data and expected results

3. Problem Analysis

4. The listing of the source program **Lab02.java**

5. Listing of the output file **Lab02Report.txt**

6. Listing of the run of the program (monitor)

**SPECIFICATIONS**

Start with the LAB02 template and copy in java statements from Lab01

Keep the input of the user name from the keyboard and the output message to the monitor

Make the following changes:

INPUT

Instead of accepting stock input from the keyboard, read it from an input file

Input file is **Lab02Input.txt** and is in the CISC122 LAB02 folder

Input record consists of the following fields:

Stock price (double)

Number of shares (double)

Annual dividend (double)

Stock ticker (String)

This file must be copied to the folder where you saved your Java program

PROCESS

You must add a loop because your program will read through and process the entire data file

Every time you go through the loop, you will read in a new record (set of data)

(Keep the processing for stock value and dividend yield)

Accumulate total stock value (goes in the loop)

OUTPUT

Output file to be created: **Lab02Report.txt**

Write a report heading (happens once, goes before the loop)

Write a column heading (happens once, goes before the loop)

Write a detail line for each stock (use printf) (happens once for each record, goes in the loop)

Write a summary line with the total stock value (use printf) (happens once, after the loop)

End report with a message and your name

SAMPLE output report (include blank lines)

“x”s and “9”s represent spacing for the report

Stock Value and Yield Report

Stock Price Shares Value Dividend Yield

xxxx 99.99 99.999 9999.99 99.99 9.99%

xxxx 99.99 99.999 9999.99 99.99 9.99%

xxxx 99.99 99.999 9999.99 99.99 9.99%

TOTAL 9999.99

Report produced by: your name

**TEST DATA and EXPECTED RESULTS**

Expected results are in a file called Lab02ExpectedResults