### **Programming Assignment 1**

Due: Demo is required in your lab by July, 9

Submit the file on Canvas by 11:00 pm on July 8, 2018

Write a program to read the data for a list of employees from a file and calculate their salary and print them to the monitor in a tabular format, refer to the sample below. Terminate the program when all data from the file are read. Data for an employee includes full name, filing status (J or j for joint and S or s for single), and taxable income on one line. The program must verify salary (positive numbers only) and status (can only be joint or single), if invalid data is entered print an error message and continue to the next employee. Use the table below to find tax\_rate:

### **SINGLE TAXPAYERS**

If The Taxable Income Is		Computed Tax				
		Is				
Over	But Not Over				Of Amount Over	
\$0	\$1710	No Tax				
\$1710	\$20930	\$87.00	plus	3.0%	\$1710	
\$20930	\$28790	\$742.40	plus	8.0%	\$20930	
\$28790	And over	\$1449.60	plus	11.0%	\$28790	

#### **JOINT TAXPAYERS**

If The Taxable Income Is		Computed Tax Is				
Over	But Not				Of Amount	
	Over				Over	
\$0	\$3420	No Tax				
\$3420	\$47120	\$330.00	plus	4.0%	\$3420	
\$47120	\$57580	\$1905.40	plus	9.0%	\$47120	
\$57580	And over	\$2899.20	plus	11.0%	\$57580	

#### **Requirements:**

Must use input file and prompt user to enter file name.

Must include at least 4 methods in addition to main

Must use at least 1 static class variable

Must check all exceptions using try and catch statement

Must use arrays to store the data

## Below is a sample input file:

Joseph Kardian

i 539590.00

Bill Jones

X 8976.0

Nancy Brown

i -9087.0

Marty Klauss

S 3390.58

# **Below is a sample output 1:**

Enter file name: data.txt

Program Number 1

Programmer Joe Blake

Class Computer Science 3

Name	Status	Gross Salary	Taxes	Net Salary
Joseph Kardian Bill Jones	Joint \$539590.00 X is invalid inpu		\$55920.30	\$483669.70
Nancy Brown Marty Klauss	Joint Single	Negative salary is \$3390.58	\$0.00	\$3390.58
Averages		\$XXXXX.XX	\$XXXX.XX	\$XXXX.XX

Program terminated on request.

Thank you for using tax program. Have a nice day.

## Below is a sample output 2: (if the data file was not found)

Enter file name: data.txt

File "data.txt" was not found, program terminated.