CSCI 112 Final Exam (Total Points: 50)

Create a program to calculate total sales of a company. This program will take as input two files:

- ItemList.txt

This file contains list of items sold by the company – it has three pieces of data: item number, item description and unit price

- ItemSales.txt

This file contains list of items sold – each row in the file represents item and number of the item sold

Using the two files, your program should create the following output

1. Quantity of items sold – the information should be displayed in a table as illustrated below

Item Number **Item Description** **Quantity Sold**

- Items should be listed in descending order of quantity sold – i.e. item that sold the most will be listed first and so on. If a particular item didn't sell, the quantity sold should be printed as 0

2. Total Sales of each item – the information should be displayed in a table as illustrated below

Item Number **Item Description** **Quantity Sold** **Unit Price** **Total Sales**

- Items should be listed in descending order of total sales – i.e. item with highest total sales will be listed first and so on. If a particular item didn't sell, the quantity sold and total sales for that item should be printed as 0; Total Sales for an item is quantity sold * unit price
- Unit Price and Total Sales should be formatted to 2 decimals.

3. Total Sales – this is the total sales value which is the sum of total sales of individual item. It should be formatted to 2 decimals.

- Each section "Quantity of Items Sold", "Total Sales of Each Item", "Total Sales" must be implemented in separate functions.
- If there are no entries in ItemList or ItemSales, the program should display an error message "Invalid input file".
- Use arrays and structures to make the life easier.

- While reading ItemSales.txt DO NOT hardcode number of items in the file. I should be able to change the data in the file and have the program calculate correct result without making any program changes.

Make sure to display appropriate heading for your output tables; output should be displayed on the screen and printed in a file (SalesSummary.txt)

Grading Rubric

1. Quantity of Items Sold: 20 points
2. Totals Sales of Each Item: 20 points
3. Total Sales: 10 points

- Each section must be implemented in full – no partial credit will be given.