Software Development

1D Lists

You are required to design and code a program for a kitchen sales company. The number of salesmen is entered initially by the user.

The program accepts from the keyboard the name of each kitchen salesman, the names are to be stored in a list. The number of kitchens that they have sold is to be read from the keyboard.

Then, for each kitchen sold, the price of that kitchen is entered.

When all kitchen prices have been entered, the system prints out the total value of sales for that salesman. The total value of sales is to be stored in a parallel list.

The program then calculates the commission payable to that salesman. No commission is paid if the value of sales is less than or equal to €50,000. Otherwise, commission is calculated at 15% of the value of sales over €50,000. The system prints the commission payable to the screen.

When all salesmen have been processed, the names and total sales figure for all the salesmen are to be printed.

The company also requires the following data to be calculated and printed:

- 1. the total commission paid by the company
- 2. the highest total sales made by a salesman and the salesman's name
- 3. the lowest total sales made by a salesman and the salesman's name

The company want to see the total sales sorted in ascending order but also wants to maintain the original data which was calculated.

Sort the total sales list and print it to the screen in an appropriate manner, you do **NOT** need to list the corresponding salesman's name for each sales value, just the sorted total sales values.

Output should be presented neatly.

Design your solution first and develop your solution **incrementally**, designing, implementing and testing as you go.

Sample Output - see next page

Kitchen Sales System

Number of Salesmen:2

Name: John Smith

Number of kitchens sold:3 Price of kitchen 1:€10000 Price of kitchen 2:€40000 Price of kitchen 3:€50000

Commission payable for John Smith : €7500.0

Name: Mark Jones

Number of kitchens sold:1 Price of kitchen 1:€20000

No commission payable for Mark Jones

Employee Total Sales
John Smith 100000.0
Mark Jones 20000.0

Total commission paid:€7500.0

Highest sales made €100000.0 by employee: John Smith Lowest sales made €20000.0 by employee: Mark Jones

Sales values in ascending order

€20000.0 €100000.0