

## PROBLEM TWO

### Sales Taxes:

Brief explanation of design:

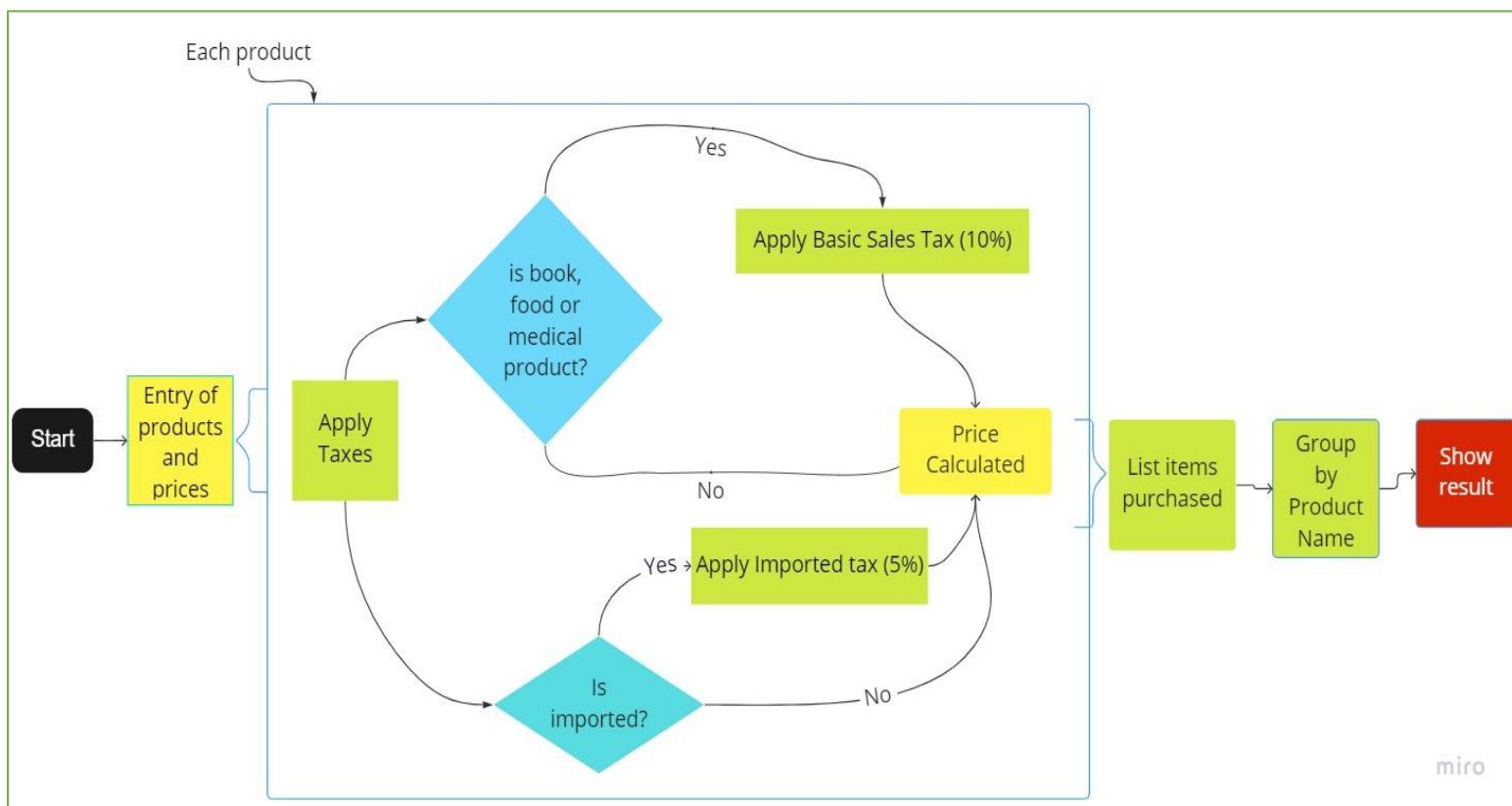
The requirement was analyzed by designing the different flows for the cases of taxes by type of product (book, food, medical product: 10%) and for the cases of imported products (5%).

Once the taxes were obtained, the respective roundings were made to the nearest 5 cents.

The resulting prices for each product are calculated.

The groupings of the products were made to show them according to the expected result in the PDF.

Visual Studio, C#, Console project, Linq queries, generic collections, conditionals, groupings, etc. were used.



Below are the tests performed and the final result. These show the expected result.

## Input 1:

### INPUT 1

1 Book at 12.49  
1 Book at 12.49  
1 Music CD at 14.99  
1 Chocolate bar at 0.85

### OUTPUT 1

Book: 24.98 (2 @ 12.49)  
Music CD: 16.49  
Chocolate bar: 0.85  
Sales Taxes: 1.50  
Total: 42.32

C:\Personal\Jobs\number8\2\Sales-Exercise\bin\Debug\net5.0\Sales-Exercise.exe

```
Enter product **NAME** : Book
Enter product **PRICE** : 12.49

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Book
Enter product **PRICE** : 12.49

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Music CD
Enter product **PRICE** : 14.99

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Chocolate bar
Enter product **PRICE** : 0.85

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,
d

***** Output *****

Book: 24.98 (2 @ 12.49)
Music CD: 16.49
Chocolate bar: 0.85
Sales Taxes: 1.50
Total: 42.32
```

## Input 2:

### INPUT 2

1 Imported box of chocolates at 10.00  
1 Imported bottle of perfume at 47.50

### OUTPUT 2

Imported box of chocolates: 10.50  
Imported bottle of perfume: 54.65  
Sales Taxes: 7.65  
Total: 65.15

C:\Personal\Jobs\number8\2\Sales-Exercise\bin\Debug\net5.0\Sales-Exercise.exe

```
Enter product **NAME** : Imported box of chocolates
Enter product **PRICE** : 10

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Imported bottle of perfume
Enter product **PRICE** : 47.5

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,
f

***** Output *****

Imported box of chocolates: 10.5
Imported bottle of perfume: 54.65
Sales Taxes: 7.65
Total: 65.15
```

## Input 3:

## INPUT 3

1 Imported bottle of perfume at 27.99  
 1 Bottle of perfume at 18.99  
 1 Packet of headache pills at 9.75  
 1 Imported box of chocolates at 11.25  
 1 Imported box of chocolates at 11.25

## OUTPUT 3

Imported bottle of perfume: 32.19  
 Bottle of perfume: 20.89  
 Packet of headache pills: 9.75  
 Imported box of chocolates: 23.70 (2 @ 11.85)  
 Sales Taxes: 7.30  
 Total: 86.53

 C:\Personal\Jobs\number8\2\Sales-Exercise\bin\Debug\net5.0\Sales-Exercise.exe

```
Enter product **NAME** : Imported bottle of perfume
Enter product **PRICE** : 27.99

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Bottle of perfume
Enter product **PRICE** : 18.99

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Packet of headache pills
Enter product **PRICE** : 9.75

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Imported box of chocolates
Enter product **PRICE** : 11.25

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,

Enter product **NAME** : Imported box of chocolates
Enter product **PRICE** : 11.25

Press [ENTER] to Add New Product, or [Other key] to Show Totals Invoices,
←

***** Output *****

Imported bottle of perfume: 32.19
Bottle of perfume: 20.89
Packet of headache pills: 9.75
Imported box of chocolates: 23.70 (2 @ 11.85)
Sales Taxes: 7.30
Total: 86.53
```

Task Done!