COSC 2336

Structs

1. Define a struct, **menuItemType**, with two components: **menuItem** of type string and **menuPrice** of type double.
2. Write a program to help a local restaurant automate its breakfast billing system. The program should do the following:
3. Show the customer the different breakfast items offered by the restaurant.
4. Allow the customer to select more than one item from the menu.
5. Calculate and print the bill.

Assume that the restaurant offers the following breakfast items (the price of each item is shown to the right of the item):

Plain Egg $1.45

Bacon and Egg $2.45

Muffin $0.99

French Toast $1.99

Fruit Basket $2.49

Cereal $0.69

Coffee $0.50

Tea $0.75

Use an array, **menuList**, of the struct **menuItemType**, as defined in A. Your program must contain at least the following functions:

* Function **getData**: This function loads the data into the array **menuList**.
* Function **showMenu**: This function shows the different items offered by the restaurant and tells the user how to select the items.
* Function **printCheck**: This function calculates and prints the check. (Note that the billing amount should include a 5% tax.)

A sample output is:

Welcome to Johnny’s Restaurant

Bacon and Egg $2.45

Muffin $0.99

Coffee $0.50

Tax $0.20

Amount Due $4.14

Format your output with two decimal places. The name of each item in the output must be left justified. You may assume that the user selects only one item of a particular type.

Create the program and run tests. Save this program as StructProgram1.

1. Modify the previous program so that the customer can select multiple items of a particular type. A sample output in this case is:

Welcome to Johnny’s Restaurant

1 Bacon and Egg $2.45

2 Muffin $1.98

1 Coffee $0.50

Tax $0.25

Amount Due $5.18

Create the program and run tests. Save this program as StructProgram2.

Don’t forget your flowchart or pseudocode.