

CS5008 HomeWork 3

Question 1

Define a `struct`, `menuItemType`, with two components: `menuItem` of type `string` and `menuPrice` of type `double`.

Write a program to help a local restaurant automate its breakfast billing system. The program should do the following:

- Show the customer the different breakfast items offered by the restaurant.
- Allow the customer to select more than one item from the menu.
- 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`,

Your program must contain 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.

Redo the above exercise 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
```
