Q1:

#include <iostream>  
#include <iomanip>  
#include <string>  
  
using namespace std;  
  
struct menuItemType  
{  
 string menuItem;  
 double menuPrice;  
};  
  
void getData(menuItemType menuList[]);  
void showMenu(menuItemType menuList[] , int n);  
void printCheck(menuItemType menuList[], int menu\_order[], int n);  
  
int main()  
{  
 const int item = 8;  
 menuItemType menuList[item];  
 int menu\_order[item] ={0};  
 int choice =0;  
 int count =0;  
 bool order = true;  
 getData(menuList);  
 showMenu(menuList,item);  
 while(order)  
 {  
 cout<<"Enter the choice for the order or press 0 to exit"<<endl;  
 cin>>choice;  
 if(choice>0 && choice<=item)  
 {  
 menu\_order[choice-1]+=1;  
 }  
 else  
 {  
 order=false;  
 }  
 }  
 printCheck(menuList,menu\_order,item);  
 return 0;  
}  
  
void getData(menuItemType menuList[])  
{  
 menuItemType plainEgg;  
 menuItemType baconEgg;  
 menuItemType muffin;  
 menuItemType frenchToast;  
 menuItemType fruitBasket;  
 menuItemType cereal;  
 menuItemType coffee;  
 menuItemType tea;  
 plainEgg.menuItem = "Plain Egg";  
 plainEgg.menuPrice = 1.45;  
 baconEgg.menuItem = "Bacon and Egg";  
 baconEgg.menuPrice = 2.45;  
 muffin.menuItem = "Muffin";  
 muffin.menuPrice= 0.99;  
 frenchToast.menuItem = "French Toast";  
 frenchToast.menuPrice = 1.99;  
 fruitBasket.menuItem = "Fruit Basket";  
 fruitBasket.menuPrice = 2.49;  
 cereal.menuItem = "Cereal";  
 cereal.menuPrice = 0.69;  
 coffee.menuItem ="Coffee";  
 coffee.menuPrice = 0.50;  
 tea.menuItem = "Tea";  
 tea.menuPrice = 0.75;  
 menuList[0] = plainEgg;  
 menuList[1] = baconEgg;  
 menuList[2] = muffin;  
 menuList[3] = frenchToast;  
 menuList[4] = fruitBasket;  
 menuList[5] = cereal;  
 menuList[6] = coffee;  
 menuList[7] = tea;  
}  
  
void showMenu(menuItemType menuList[], int n)  
{  
 int count;  
 cout<<"Restaurant Breakfast Menu"<<endl;  
 cout<<endl;  
 for(count=0; count<n;count++)  
 {  
 cout<<setw(2)<<left<<count+1<<setw(20)<<left  
 <<menuList[count].menuItem<<'$'<<menuList[count].menuPrice<<  
 endl;  
 }  
}  
  
void printCheck(menuItemType menuList[], int menu\_Order[], int n)  
{  
 double Bill = 0;  
 double calculated\_Tax =0;  
 const double Tax = .05;  
 cout<<"Welcome to Johnny's Restaurant"<<endl;  
 for(int i=0;i<n;i++)  
 {  
 if(menu\_Order[i]>0)  
 {  
 cout<<fixed<<setprecision(2)<<setw(20)<<left<<  
 menuList[i].menuItem<<'$'<<(menuList[i].menuPrice\*menu\_Order[i])  
 <<endl;  
 Bill+=(menuList[i].menuPrice\*menu\_Order[i]);  
 }  
 }  
 calculated\_Tax = Bill\* Tax;  
 Bill+= calculated\_Tax;  
 cout<<setw(20)<<left<<"Tax"<<'$'<<fixed<<setprecision(2)  
 <<calculated\_Tax<<endl  
 <<setw(20)<<left<<"Amount Due"<<"$"<<Bill<<endl;  
}

Restaurant Breakfast Menu

1 Plain Egg $1.45

2 Bacon and Egg $2.45

3 Muffin $0.99

4 French Toast $1.99

5 Fruit Basket $2.49

6 Cereal $0.69

7 Coffee $0.5

8 Tea $0.75

Enter the choice for the order or press 0 to exit

2

Enter the choice for the order or press 0 to exit

3

Enter the choice for the order or press 0 to exit

7

Enter the choice for the order or press 0 to exit

0

Welcome to Johnny's Restaurant

Bacon and Egg $2.45

Muffin $0.99

Coffee $0.50

Tax $0.20

Amount Due $4.14

Process finished with exit code 0

Q2:

#include <iostream>  
#include <iomanip>  
#include <string>  
  
using namespace std;  
  
struct menuItemType  
{  
 string menuItem;  
 double menuPrice;  
};  
  
void getData(menuItemType menuList[]);  
void showMenu(menuItemType menuList[] , int n);  
void printCheck(menuItemType menuList[], int menu\_order[], int n);  
  
int main()  
{  
 const int item = 8;  
 menuItemType menuList[item];  
 // int countItem[item];  
 int menu\_order[item] ={0};  
 int choice =0;  
 int count =0;  
 bool order = true;  
 getData(menuList);  
 showMenu(menuList,item);  
 while(order)  
 {  
 cout<<"Enter the choice for the order or press 0 to exit"<<endl;  
 cin>>choice;  
 if(choice>0 && choice<=item)  
 {  
 menu\_order[choice-1]+=1;  
 }  
 else  
 {  
 order=false;  
 }  
 }  
 printCheck(menuList,menu\_order,item);  
 return 0;  
}  
  
void getData(menuItemType menuList[])  
{  
 menuItemType plainEgg;  
 menuItemType baconEgg;  
 menuItemType muffin;  
 menuItemType frenchToast;  
 menuItemType fruitBasket;  
 menuItemType cereal;  
 menuItemType coffee;  
 menuItemType tea;  
 plainEgg.menuItem = "Plain Egg";  
 plainEgg.menuPrice = 1.45;  
 baconEgg.menuItem = "Bacon and Egg";  
 baconEgg.menuPrice = 2.45;  
 muffin.menuItem = "Muffin";  
 muffin.menuPrice= 0.99;  
 frenchToast.menuItem = "French Toast";  
 frenchToast.menuPrice = 1.99;  
 fruitBasket.menuItem = "Fruit Basket";  
 fruitBasket.menuPrice = 2.49;  
 cereal.menuItem = "Cereal";  
 cereal.menuPrice = 0.69;  
 coffee.menuItem ="Coffee";  
 coffee.menuPrice = 0.50;  
 tea.menuItem = "Tea";  
 tea.menuPrice = 0.75;  
 menuList[0] = plainEgg;  
 menuList[1] = baconEgg;  
 menuList[2] = muffin;  
 menuList[3] = frenchToast;  
 menuList[4] = fruitBasket;  
 menuList[5] = cereal;  
 menuList[6] = coffee;  
 menuList[7] = tea;  
}  
  
void showMenu(menuItemType menuList[], int n)  
{  
 int count;  
 cout<<"Restaurant Breakfast Menu"<<endl;  
 cout<<endl;  
 for(count=0; count<n;count++)  
 {  
 cout<<setw(2)<<left<<count+1<<setw(20)<<left  
 <<menuList[count].menuItem<<'$'<<menuList[count].menuPrice<<  
 endl;  
 }  
}  
  
void printCheck(menuItemType menuList[], int menu\_Order[], int n)  
{  
 double Bill = 0;  
 double calculated\_Tax =0;  
 const double Tax = .05;  
 cout<<"Welcome to Johnny's Restaurant"<<endl;  
 for(int i=0;i<n;i++)  
 {  
 if(menu\_Order[i]>0)  
 {  
 cout<<fixed<<setprecision(2)<<menu\_Order[i]<<' '<<setw(20)<<  
 menuList[i].menuItem<<'$'<<(menuList[i].menuPrice\*menu\_Order[i])  
 <<endl;  
 Bill+=(menuList[i].menuPrice\*menu\_Order[i]);  
 }  
 }  
 calculated\_Tax = Bill\* Tax;  
 Bill+= calculated\_Tax;  
 cout<<" "<<setw(20)<<"Tax"<<'$'<<fixed<<setprecision(2)  
 <<calculated\_Tax<<endl  
 <<" "<<setw(20)<<"Amount Due"<<"$"<<Bill<<endl;  
}

Restaurant Breakfast Menu

1 Plain Egg $1.45

2 Bacon and Egg $2.45

3 Muffin $0.99

4 French Toast $1.99

5 Fruit Basket $2.49

6 Cereal $0.69

7 Coffee $0.5

8 Tea $0.75

Enter the choice for the order or press 0 to exit

2

Enter the choice for the order or press 0 to exit

3

Enter the choice for the order or press 0 to exit

3

Enter the choice for the order or press 0 to exit

7

Enter the choice for the order or press 0 to exit

0

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

Process finished with exit code 0