#include <iostream>

#include <iomanip>

#include <string>

using namespace std;

struct menuItemType

{

string menuItem;

double menuPrice;

int count;

};

void getData(menuItemType menuList[], menuItemType counter[]);

void showMenu(menuItemType menuList[], int x);

void printCheck(menuItemType menuList[],menuItemType count[], int menuOrder[], int x);

int main()

{

const int menuItems = 8;

menuItemType menuList[menuItems];

menuItemType count[menuItems];

int menuOrder[menuItems] = { 0 };

int orderChoice = 0;

bool ordering = true;

getData(menuList,count);

showMenu(menuList, menuItems);

while (ordering)

{

cout << "Enter the number for the item you would\n"

<< "like to order, or enter [0] to complete your order." << endl;

cin >> orderChoice;

if (orderChoice > 0 && orderChoice <= menuItems)

{

menuOrder[orderChoice - 1] += 1;

}

else

ordering = false;

}

printCheck(menuList,count, menuOrder, menuItems);

system("pause");

return 0;

}

void getData(menuItemType menuList[], menuItemType counter[])

{

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 x)

{

int count;

cout << "Welcome to the restaurant" << endl;

cout << "What would you to order?" << endl;

for (count = 0; count < x; count++)

{

cout << setw(2) << left << "[" << count + 1 << "]"

<< menuList[count].menuItem << '$'

<< menuList[count].menuPrice << endl;

}

}

void printCheck(menuItemType menuList[], menuItemType counter[], int menuOrder[], int menuItems)

{

double AmountTotal = 0;

double Tax = 0;

double AmountDue;

const double TAX = .05;

cout << "Thanks for eating" << "Customer check: " << endl;

for (int i = 0; i < menuItems; i++)

{

if (menuOrder[i] > 0) {

cout << setprecision(3) << setw(15) << left << menuList[i].menuItem<< menuOrder[i] <<" "

<< '$' << (menuList[i].menuPrice \* menuOrder[i]) << endl;

AmountTotal += (menuList[i].menuPrice \* menuOrder[i]);

}

}

Tax = AmountTotal \* TAX;

AmountDue=AmountTotal +Tax;

cout << setw(20) << left << "AmountTotal"<<'$'<< AmountTotal << endl

<< setw(20) << left << "Tax" << '$' << Tax << endl

<< setw(20) << left << "AmountDue" << '$' << AmountDue << endl;

}