Credit Name: CSE 2140 2nd Language Programming

Assignment Name: LunchOrder mastery

How has your program changed from planning to coding to now? Please explain?

First of all, I found the way to create a reusable code like those two parts

```java
// method to ask the user for the number of each item
public static int getUserInput(Scanner scanner, String item) {
    System.out.print("How many " + item + " would you like?: ");
    return scanner.nextInt();
```

So I did not need to create an individual line of code for each item, like that

```java
// Prompt the user to enter the number of each item
System.out.print("Enter the number of hamburgers: ");
int numHamburgers = scanner.nextInt();
displayNutrition("Hamburger", hamburger);
System.out.print("Enter the number of salads: ");
int numSalads = scanner.nextInt();
displayNutrition("Salad", salad);
System.out.print("Enter the number of French fries: ");
int numFries = scanner.nextInt();
displayNutrition("French Fries", fries);
System.out.print("Enter the number of sodas: ");
int numSodas = scanner.nextInt();
displayNutrition("Soda", soda);
```

There is other reusable codes like this

```java
// Show description and total nutrition
System.out.printf("\nDescription of %s:\n%s\n", itemName, food.getDescription());
System.out.printf("%s (for %d units):\n", itemName, quantity);
System.out.printf("Fat: %dg, Carbohydrates: %dg, Fiber: %dg\n\n", totalFat, totalCarbs, totalFiber);
```

That replaces individual messages for each item (I never created them before so I don't have the sample).

There are also description messages that I create, hmm, well, in a curious way, I was very hungry at that moment so I started to create different descriptions of the food, imagining them, then it gave me the idea to create a more immersive experience with welcome and goodbye messages.

And looking for realism and immersion I thought is better for the user to know the nutritional information according to his/her order and the number of the item:

```java
public static void displayNutrition(String itemName, Food food, int quantity) {
    int totalFat = food.getFat() * quantity;
    int totalCarbs = food.getCarbohydrates() * quantity;
```

```java
int totalFiber = food.getFiber() * quantity;
```