I. Project Description

You will create a Point of Sales System for a fast food restaurant. Their menu is shown below:

Ala Carte Items		**Combo Items**	
Beef Burger	₱80	Beef Burger Regular Combo	₱100
Chicken Burger	₱70	Beef Burger Large Combo	₱110
Regular Fries	₱20	Chicken Burger Regular Combo	₱90
Large Fries	₱30	Chicken Burger Large Combo	₱100
Regular Soda	₱15		
Large Soda	₱20		

The program should in the main menu. The main menu contains the following options:

1. Setup
2. Start Day
3. Exit

The *Setup* menu allows you to edit the price of each item in the menu displayed above. Note that the actual items in the menu are fixed. The only thing that can be changed are the prices. Upon selecting *Setup* from the main menu, the program should prompt the user to input the price for each of items in the menu listed above. After asking for the price of item, the program will display a summary of the menu, as shown below:

```
Ala Carte Items                 Price
Beef burger                     P80
Chicken burger                  P70
Regular Fries                   P20
Large Fries                     P30
Regular Soda                    P15
Large Soda                      P20

Combo Items                     Price
Beef Burger Regular Combo       P100
Beef Burger Large Combo         P110
Chicken Burger Regular Combo    P90
Chicken Burger Large Combo      P100
```

There should also be an option to go back to main menu once the changes have been made.

The *Start Day* option starts the day. From here, you can do the following actions:

1. Restock. This option allows you to add items in the inventory, which are used to make the different products in the menu. The user will encode the quantity to be added for each item in the inventory. These items include:

   A. Burger Bun
   B. Beef Burger Patty
   C. Chicken Burger Patty
   D. Regular Soda Cup
   E. Regular Fries
   F. Large Fries
   G. Burger Wrap
   H. Large Soda Cup

Note that when the program is initially started, all items in the inventory will have a stock of 0.

2. View Inventory. This option will display all the items in the inventory and how many of each are remaining.
3. Accept Order. For each customer transaction, the following are performed:

   A. Generation of the customer's receipt which includes the total sales, amount paid, and change.

   B. Update on the inventory. The system knows the items needed per order, and these will be deducted from the inventory. For instance, the Beef Burger Regular Combo will use the following:

      - 1 burger bun
      - 1 beef burger patty
      - 1 burger wrap
      - 1 regular fries
      - 1 regular soda cup

   The system should be able to check if the store is still capable of providing each order.

   A sample receipt is shown below:

```
Customer #1
2 Beef Burger – P160
1 Regular Soda – P15
Total amount: P175
Amount Received: P200
Change: P25
```

4. End Day. This option ends the day. At the end of the day, the system will generate a report that includes the following:

   A. Total customers for the day.

   B. Sales breakdown for the day. This tells us how many number of orders for each item in the menu were received for that day.

   C. Total sales for the day.

   D. Inventory at the end of the day.

   A sample day-end report is shown below:

```
Day-end Report

Total Customers:  25

Sales:

Item                          Qty    U-Price   Amt
Beef burger                   5      80        400
Chicken burger                7      70        490
Regular Fries                 10     20        200
Large Fries                   15     30        450
Regular Soda                  20     15        300
Large Soda                    25     20        500
Beef Burger Regular Combo     10     100       1000
Beef Burger Large Combo       7      110       770
```

```
Chicken Burger Regular Combo      15      90        1350
Chicken Burger Large Combo        24      100       2400


Total Sale: P7860

Final Inventory:

Burger bun             5
Beef burger patty      8
Chicken burger patty   10
Regular fries          4
Large fries            12
Burger wrap            30
Regular soda cup       20
Large soda cup         13
```

II. Important Notes

1. The project must be submitted on or before November 23, 2015 (Monday) on or before 11:59 PM.
2. Compile your program successfully before submitting. Make sure you test your program completely (compiling and running) in the G302 / G304 laboratories.
3. Do not use brute force.
4. You may use topics outside the scope of LOGPROG but this will be self-study.
5. Include internal documentation (comments) in your program. On top of each crucial segment in your code, place the following:

   ```
   ############
   # Task:
   # Description:
   # Variables used:
   # Outputs:
   ############
   ```

6. On or before the deadline, email a copy of your source code with the following format:

   To: *your instructor's email address*

   cc: *your own email address*

   Subject: LOGPROG-MP *your section – surname*, *first name*

   Attachment: *surname first name*.py

7. Use *surname first name*.py as your file name.
8. Being unable to show up on the demo schedule, or being unable to convincingly answer the questions during the demo will merit a grade of 0.0 for the course.
9. This is an individual project. Any form of cheating (working in collaboration, asking for other people's help without understanding, copying any part of other's work, etc.) will merit a grade of 0.0 and a discipline case.
10. Any form of requirement not fully implemented or instruction not followed will merit deductions.