ANKARA UNIVERSITY

COM1002

Spring 2022-23 Term

Programming Assignment #1

Due Date: 06.04.2023

In this assignment you will create a basic online shopping system. The menu of the system is shown below. Your program needs to create the same menu content as depicted below before taking any inputs from the user. The products and prices in the menu are static, so they will have the same values for all executions.

```
****************Online Shopping*****************
1- Apple        5$
2- Orange       7$
3- Tomate       9$
4- Meat         50$
5- Chicken      25$
6- Milk         2.5$
7- Yoghurt      4.2$
8- Egg          1.1$
9- Lemonate     1.9$
10-Coke         2.3$
************************************************
Please enter your choice and quantity(Enter '0' for exit, '-1' for total price):
```

As seen in the menu, your program asks the user which product they want to buy and the quantity of it, until the user enters '0' or '-1'. Hence, basic use cases are summarized as follows:

- User provides a list of some menu items and corresponding quantities for each item.
- If the user enters '-1', the program prints the total price and asks the user the amount of money that they pay. If the money is enough for the total price, the program is terminated. If the money is not sufficient, then your program asks the user to add some more money.
- If the user enters '0' after/during ordering some items from the menu, it means that the user wants to cancel shopping. In order to make sure, your program is required to ask **'Are you sure (y/n) : '**. If the answer is *'y'*, terminate the program. If the answer is *'n'*, the program continues.

This is the basic online shopping program structure. You are also provided some sample input and corresponding output files. Please carefully analyze the given sample input and output files and write your program accordingly. **Make sure that the given output files and your program's output files are the same.**

Testing and validating your program:

Assume that your executable program file is **PA1,** test your implementation from an Ubuntu terminal as follows:

> ./PA1<input1.txt>my_output1.txt

> ./PA1<input2.txt>my_output2.txt

Make sure that my_output1.txt is exactly the same with output1.txt file that are provided to you.

Similarly, my_output2.txt is exactly the same with output2.txt

Hint: You can compare two files automatically line by line using **diff** command from an Ubuntu

terminal:

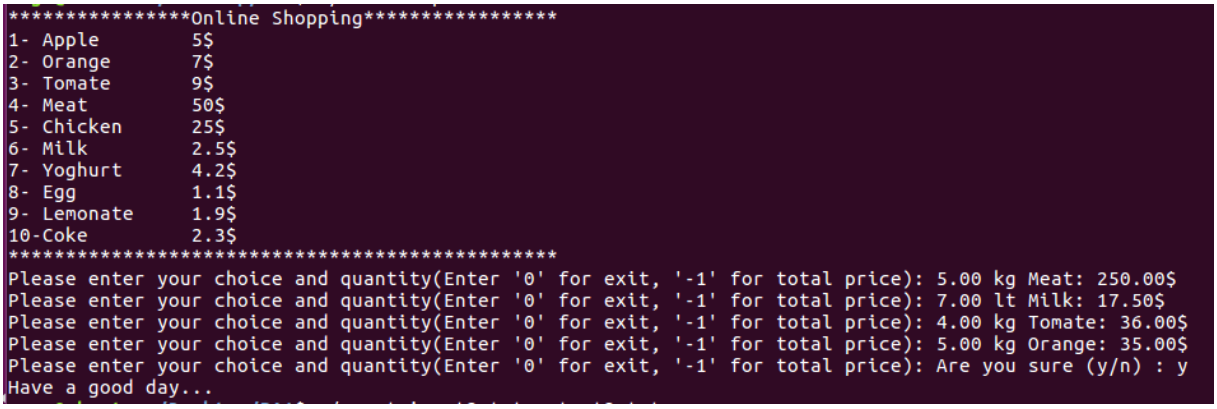
>diff my_output1.txt output1.txt

When you run the given inputs from the console, you will get the following outputs.

> 4 5
6 7
3 4
2 5
-1
300
40

```
***************Online Shopping****************
1- Apple        5$
2- Orange       7$
3- Tomate       9$
4- Meat         50$
5- Chicken      25$
6- Milk         2.5$
7- Yoghurt      4.2$
8- Egg          1.1$
9- Lemonate     1.9$
10-Coke         2.3$
**********************************************
Please enter your choice and quantity(Enter '0' for exit, '-1' for total price): 5.00 kg Meat: 250.00$
Please enter your choice and quantity(Enter '0' for exit, '-1' for total price): 7.00 lt Milk: 17.50$
Please enter your choice and quantity(Enter '0' for exit, '-1' for total price): 4.00 kg Tomate: 36.00$
Please enter your choice and quantity(Enter '0' for exit, '-1' for total price): 5.00 kg Orange: 35.00$
Please enter your choice and quantity(Enter '0' for exit, '-1' for total price): -1
Your total price is 338.50$. How much money you enter: 300.00$
Your money is not enough. You must add 38.50$ for total price. How much money you enter: 40.00$
Total price has been paid. Your remaining money 1.50$.
Have a good day...
```

> 4 5
6 7
3 4
2 5
0
y



Submission:

Before submission, rename your source file name as **StudentNumber.c**