Pharmacy System

Project Description:
It is required to develop a program that operates on Medicine data to develop a simple pharmacy management system.

Medicine Data Record

1- Medicine ID (ex: 1001).
2- Medicine Name (ex: Panadol).
3- Quantity (ex: 300).
4- Medicine Company (ex: Pharmatech).
5- Medicine Price (ex: 15). // Put the currency when you print (LE).
6- Medicine Manufacturing Date (15-10-2018).
7- Medicine Expiry Date (15-10-2020).

Operations:

#	Operation	Action Required
1	**AddMedicine** ()	Uses the medicine data to store it. So, you can operate on it. (Storing in a file is **BONUS**)
2	**DeleteMedicine**	Delete the medicine that you stored. Deletion operation can be done by Medicine Name or Medicine ID (medicine name and ID are unique for each medicine)
3	**UpdateMedicine(Medicine ID)**	Update the medicine details (Name or Quantity… etc). To be able to do that, ask the user should provide the Medicine ID.

4	**PrintMedicinesInStock**	In this operation, you will retrieve and print ALL the stored Medicines in stock with their details (ID, Name, Quantity and Price, etc). Display all this information in a table.
5	**GetMedicineInfo**	Print the stored info of a certain info given medicine name or ID
6	**SellMedicine**	In this operation, the user will enter the Medicine Id or Medicine name. Show the details of the medicine including available quantity. Check if the user likes to buy the chosen medicine. If yes, ask about the quantity and calculate the price. Decrease the medicine quantity in stock.
7	**Quit**	End the program.

Input / Output Samples:

1) Add Medicine.
2) Delete Medicine.
3) Update Medicine details.
4) Print All Medicines in Stock.
5) Print info of Certain Medicine
6) Sell Medicine
7) Quit.

Add Medicine

```
Enter Medicine Id
1001
Enter Medicine Name
Panadol
Enter Company Name
PharmaTech
Enter Manufactured Date
12-3-2018
Enter Expiry Date
12-4-2021
Enter Quantity
30
Enter Price
10
Medicine with id 1001 Added Successfully
To Continue with other Options Enter 1 Else any other number
```

Update Medicine details

```
Enter
1 - Change Quantity
2 - Change Price
3 - Change Name
4 - Change Company
5 - Change Manufaturing Date
6 - Change Expiry Date
```

```
Any other number to exit 1
Enter Quantity to be changed
20
Quantity changed Successfully
Enter 1 to Change other Details Else any other number
```

General Constraints:

- All your code should be in one file.
- At any operation if the user selection is not in the menu, the operation should print “none”.
- If name field is used in any operation (delete, search, update, ..etc) instead of ID, it should be case insensitive. For example, if user entered medicine name "panadol" or "PANADOL" or "Panadol" to delete, all should be matched similarly.
- Output should not include any extra white spaces or any extra text more than the results.
- Do not clear the screen after every operation.
- Only submit the source code file (.c file) on Moodle (Do NOT submit the whole project or a zipped folder of any kind).

Bonus (20 points):

Store the medicines data in a text file and read this data to initialize the stock when the program starts. Newly entered medicines should be added to the text file and deleted medicines should be removed from the text file.

Grading Rubrics:

- Specifications: The program works and meets all the requirements (55%).
- Readability: The code is well organized and easy to follow (15%).
- Documentation: The code is well documented and clearly explained (20%).
- Delivery: The program was delivered on time (10%).

Submission:

Each project submission (on Moodle) must include:

1- Code in one (.c) file.

2- A report with the following:

a. Team member names and IDs
b. Application description
c. Flowchart of execution sequence
d. Sample input and output screens.

Due Date:

Thursday 3 June 2021, 10:00pm

Late submissions will be penalized.

Teams:

Work in groups of 4-5 students.

Plagiarism:

Plagiarism is a serious academic offence and students who share code with others or get any source from the internet will fail the course. A plagiarism detection tool will be used to check all projects submitted and check and report plagiarism cases.