Case:

Create a stock management program that will be used to manage some **Item** data. It will be used to display data, to sort data with certain criteria, to search data and to perform the transaction (add and decrease stock). The **Item** data consists of itemCode, name, category, stock.

The program must have features/menus as follows:

- 1. Input/add Item data
- 2. Display all Item data
- 3. Sort Item data based on the stock values in ascending mode
- 4. Display Items data classified as food that have no stock
- 5. Search ${\bf Item}$ data based on the ${\bf name}$ keyword
- 6. Add the stock for certain Item
- 7. Decrease the stock for certain Item

Use the following data for on your program

itemCode	name	category	Initial stock
16030927	Indomilk	drink	100
16100617	Sprite	drink	70
16240401	Yakult	drink	500
16270525	Indomie	food	250
16971204	Oreo	food	320
16100727	Chocochips	food	120
16460329	Ballpoint	stationary	75
16320421	Pencil	stationary	110
16180729	Book	stationary	57

Question:

Based on the case given above:

- 1. Create class diagram/s for your program design
- 2. Create the program that implements class diagram to solve the problem of the case above (give comments to give explanation for the source code)
- 3. Put the (1) class diagram, (2) screenshoot of your program source code and (3) screenshoot of the output of the program in a PDF file
- 4. Submit the PDF file through your LMS account