Faculty College of Information and technology previously known as PUCIT has a history of over 20 years. It comprises of four distinct departments with over 56 faculty members. The institution is responsible to provide necessary resources to the faculty members like stationery items, accessories, machines, etc. The current mechanism to keep track of this inventory is slow and needs to be replaced. As a student of this institute, it is your responsibility to provide a software solution to manage the inventory. The system will be responsible to perform the following functionality.

* Add inventory items.
* View all inventory items.
* Search inventory item.
* Edit inventory item (Including item count).
* Delete inventory item.
* Assign inventory item.
* Retrieve inventory item.

View the list of faculty members who have borrowed a specific item. An inventory item will be an instance of structure Inventoryltem, It would have following attributes.

* Name
* Item ID
* Category
* Item\_count
* Allocated to

Allocated to is as an array containing information about the faculty members who have currently borrowed that specific item. To keep the system simple, suppose it contains only the name of the faculty members. (Bonus credit will be given to the student who will use structures instead of name). When an item is assigned to a faculty member its name (or additional info) is added into the array and the item count of that specific item is decreased by one. When an inventory item is retrieved, the information of that faculty member is removed from the list and item count is increased by one. Each inventory item will be stored and retrieved from a file. On loading, the system will fetch data from the file and display a menu showing the functionality mentioned aboveso that user can choose.

Note:

The records of the inventory items should be stored on a file named

"inventory\_item\_data.txt".

Bonus credit of solid marks will be given for GUI implementation of the project.