1)Why are Data Structures and Algorithms Essential in Inventory Management?

In inventory management system we need to handle large amount of data,we need to store data,Search data,insert data,manipulate data.for doing such things we need Data Structure and Algorithm.Data Structure tells how we can store data in our memory whereas algorithm helps us to manipulate with such data.

2)Discuss the types of data structures suitable for this problem.

The type of Data structure suitable for this problem is ArrayList,HashMap,LinkedList

3)Analyze the time complexity of each operation (add, update, delete) in your chosen data structure.

The time complexity for each type of operation is O(1) because I have use Hash Map which takes constant time for adding ,updating and deleting items.