Navraj Singh 1310194
Risham Singh 1313527
CSCI260 - W03
10/24/23

Proposal

1. The problem is we want to organize the tools and parts in our garage. Specifically, prevent having duplicate items, ordering multiple things, and easily finding where everything is.

2. Our software will solve it through basically creating an inventory management system. The software will keep track of the tools/parts in an organized manner and have functions to keep track of the quantity, search and retrieve the location of these tools, and even highlight certain things that need to be ordered if they're low on supply.

3. More specifically, we can use the data structures learned in class. For example, the arrayLists can be used to store the different types of tools we have and add any new tools that we add to our garage. We can use linked lists to keep track of tools or parts that need to be ordered or if quantity is running low. Bubble sort can be used if we want to sort our inventory by a specific category i.e. name. We can use a stack for the history of when tools were used and our "history" of inventory. A queue can be used as a "line" of who wants to use the tools and what tasks need to be done to maintain the inventory. HashMap can be used to lookup tools very fastly.