Niema Widaha
MAC 286 — Discussion 1

What data type should I use for this problem?

I would use a linked list to store the information for this data structure because of its efficient insertion. We can use a linked list to craft the structure that's needed and create the functionality for what we want to be able to do. It's easier to store data of different sizes in a linked list. For example, we can create an Exit Node, that has a multi-faceted constructer and data members that allow us to store the information we obtain, like the String exit name and int exit number. With an Exit Node class, we can also build in accessor and mutator functions so that we can perform the operations needed, like given an exit number, returning the exit name. Also if we created a LinkedListInterstate Class, we can build functions that utilize the Exit Node class, like a findTheNearestExit(ExitNode currentExit). Also we can create another method in this class, called distanceFromBasepoint(ExitNode currentNode).