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Priority Queue Plan

The main idea behind how I’m going to incorporate a heap into this project is to give each passenger an ID number. Each passenger’s ID will be based on their level of priority. I intend on having a linked list MAX\_PASSENGERS long for *each* priority level (where MAX\_PASSENGERS is a constant integer with a value equal to the total number of people that can fit in one queue). When I’m adding a new person to the queue, I’ll just look at their level of priority and grab the first available ID number from the respective linked list; they are MAX\_PASSENGERS long in the off-chance that a full queue of passengers contains only one priority level. As for which number to start at in each linked list, I’ll just use an enumerator with each priority level and multiply that but MAX\_PASSENGERS, then increment by one for each new ID in the linked list. Once I know the range of numbers per priority level, I’ll be able to add all types of passengers into one heap. I’m not sure if I will create a heap or a binary search tree yet.