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CSS 342

Program 4

The data structure I would use for this program is a priority queue. I would use a priority queue because it works like a heap but gives priority to specific items. The priorities would be given to emergency landings, and to the designated concourse the airline is supposed to be at. For example, if an Alaska Airlines flight is landing the priority would be for it to go to concourse C, D, or North Satellite. If those gates are empty the airplane will go to one of the open concourses. Otherwise, if they are all filled, it would need to be handled with a conditional statement that sends the airplane to a gate that is open. The queues would have to be set up for each concourse in this situation.