

Advanced Programming COEN 11

Lab 6

Lab 7

- Restaurant Waiting List with 4 ranges of group sizes
 - 1-2
 - 3-4
 - 5-6
 - ≥ 7
- Use an array of linked lists
 - One list per range
 - Use a switch to select the list

Lab 7

- The waiting list is created interactively with the following commands
 - 1 name number - insert a node with the name and number of people specified in the corresponding list
 - 2 table_size - show and delete the oldest node with number \leq table_size from the best list (start from the closest and move up)
 - 3 - print the list for each range: name and number, from oldest to newest
 - 4 - save and quit

Lab 7

- Do not allow names to repeat
 - Check all the lists before inserting
- Keep your lists in the oldest-to-newest order
 - Always insert a new entry at the end of the appropriate list
 - Tail pointers make it more efficient
- To show the lists
 - Traverse each list using the the pointers
- To sit a group
 - Traverse each list, from the closest to the smallest range
 - Change pointers to eliminate the node
 - Free the node at the end

Lab 7

□ Requirements

- Array of lists
- Names cannot repeat
- Free all the nodes before quitting

Lab 7

□ Extra Credit

- Add a command to change the size of a group for a reservation
- Enter the name and new size of the group