

## Advanced Programming

COEN 11, Fall 2014

### Lab 2

#### Restaurant Waiting List

##### Definition

The waiting list is created interactively by typing one of the following commands with their arguments provided in a menu:

>1 <name> <number>

// Adds the name and number of people specified to the bottom of the list

> 2 <size>

//Removes (show and delete) oldest entry which fits the size of the table

> 3

// Shows the list, name and number, from oldest to newest

> 4

//Quits

##### Requirements

- ✓ Variables needed: 2 arrays (one for the names and one for the numbers) and a counter (size of the list)
- ✓ Loop forever accepting commands (until quit)
- ✓ Create 3 functions one for each of the following operations:
  - insert, remove, and show list
- ✓ Do not allow names to repeat
- ✓ List mechanism
  - Your list should stay in the oldest-to-newest order
  - Always insert a new entry at the bottom
  - Always shift entries up after deleting one

##### Extra Credit

Give the next table available to the largest entry that fits its size. If there is more than one with the same largest size, the oldest one should be selected.

Add comments explaining how you did it.