

This document is subject to change and is not considered complete at this time.

Coding Assignment 7

Libraries

This assignment will require the use of 4 libraries.

ListLib.c/ListLib.h

QueueLib.c/QueueLib.h

StackLib.c/StackLib.h

BSTLib.c/BSTLib.h

Your makefile will need to be expanded to compile these 4 libraries with your Code7.c file. All of the code for handling the linked list should be in the ListLib library. All of the code for handling the queue should be in the QueueLib library. All of the code for handling the stack should be in the StackLib library. All of the code for handling the Binary Search Tree (BST) should be in the BSTLib library. I will be providing you with the header files for all 4 of these libraries. You will be required to use the functions as defined the provided header files. I will also provide a written description of what the function does so that you will know what to pass in and what to expect back. You will write the functions for your .c library functions but you must use the provided function names and parameters. See Testing below for the importance of following this.

Command Line Parameters

RECEIPTNUMBER=

The starting value of this run's receipt numbers. Treat this value as a number.

QUEUE=

Name of file containing a list of customer names

ZIPFILE=

Name of the file containing the name of the theater (max 40 characters), its zip code (max 5 characters), the name of the file containing the theater's seat map (max 100 characters) and the dimensions of the seat map. Make no assumptions about the format of the file name – use the name as-is – don't add or subtract anything – use it as shown in the file. This file will consist of one line of X's and O's (letter O).

```
AMC The Parks At Arlington 18|76015|file1.txt|10x9
AMC Dine-In Clearfork 8|76109|file2.txt|11x5
AMC EastChase 9|76120|file13.txt|10x10
AMC Palace 9|76102|myfile.it|5x4
Studio Movie Grill|76011|cat.dog|4x10
Movie Tavern at Green Oaks|76017|abc.def|6x7
Studio Movie Grill Arlington|76018|xxxx.zzz|9x9
```

Sample myfile.it

OOOOOOOOOOOOOOOOOOOO

Queue

Read in a file of names (`QUEUE=`). The file consists a list of customer names. For example

```
Bugs Bunny
Daffy Duck
Tweety
Elmer Fudd
Marvin the Martian
Sylvester
```

Put the customer names in a queue. Each node of the queue will contain a `char` array of size 30 to hold the customer's name. Please note that the customer name may contain spaces (use `fgets`). If the file open fails, print a message and exit.

Binary Search Tree

Use the data from `ZIPFILE=` to create a binary search tree. Use the zip code as the value used to create the tree. Each node of the binary search tree will contain the name of the theater, the zip code, the name of the file containing the theater's seat map and the dimensions of the seat map. If the file open fails, print a message and exit.

Stack

Each time a customer is served (buys tickets), a receipt is created and added to a stack. A receipt (stack node) will contain the receipt number and a **linked list** containing each seat sold per customer. Seats will be inserted in order in the linked list so that when the receipts are printed, the seats print in order. If a customer buys C3, A1 and E7, then the linked list of seats in the stack node will be in A1, C3, E7 order. The receipt number should start with the value passed on the command line and be incremented each time a receipt is created. One receipt per customer.

Process

Process the command line arguments.

Create a generic 2D array of size 26x20 which will be used to hold any of the seat maps. We will only use rows A-Z and seats 1-20. This will ensure we can display the seat map on the screen.

Read the `QUEUE=` file and create the queue of customers.

Read the `ZIPFILE=` and create the binary search tree.

Print the menu

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Be sure to validate the choice from the menu.

Your program should stop running/gracefully complete when the line is empty. There is no option to quit before your job of selling tickets is complete.

Sell tickets to next customer

Dequeue the head of the queue. Print the customer's name and display the list of theater names and zip codes from the binary search tree (BST). Prompt the customer to enter the zip code of the theater from which they wish to purchase tickets. Using the zip code, search the BST for that zip code. Once found, extract the name of the file containing the seat map and the dimensions of the theater. Open the file containing the seat map and read it into the 2D array using the dimensions found in the BST node. If the data in the file exceeds the dimensions allowed by that particular theater, then display a message about an invalid seat map and prompt the customer to pick a different theater.

Display the seat map and prompt for how many tickets they would like to purchase. For each ticket, prompt the customer to pick a seat. Translate the input seat choice to a row-column pair. Validate that the row,column is inside the bounds of the theater. If the seat is invalid, then tell the customer, redisplay the seat map and prompt for a new choice for seat. Once the customer has entered a valid seat, check if the seat has been sold. If it has been sold, then inform the customer and prompt for a new seat choice. Revalidate the seat choice before checking if it is available. Customer should be able to select multiple invalid seats and sold seats but should still be able to buy the desired number of tickets.

After completing a sale to a customer, write the seat map back out to the file from which you read it. This will allow you to keep track of sold seats between customers. Create a receipt for the customer on the stack. The linked list of tickets should be formed as tickets are sold (you **cannot** store the sold tickets in an array and then write them to the stack node's linked list).

See who's in line

This option should traverse the queue and print each customer's name in order from head to tail to show who's in line.

See the seat map for a given theater

When this option is chosen, display the list of theater names and zip codes and allow the input of a zipcode. Find that zip code in the BST, read the file containing the seat map into your generic array and display it. This functionality should mostly be a reuse of the code from selling tickets.

Print today's receipts

When this option is chosen, the contents of the stack should be displayed by popping each node from the stack and displaying its contents. Once the receipts have been displayed, the stack should be have completely emptied and a rerun should state that today's receipts have already been displayed. The receipt number should be displayed along with the tickets that were sold on that receipt. The tickets should have been stored in the linked list in the stack node in order; therefore, they should print in order when the receipts are displayed.

Testing

Your code will be tested two ways.

1. A file of my choice will be used for the customer list and the theater zip list. Your program will need to use both of those files correctly – sell tickets and display the line of customers and print the day's receipts.
2. The GTA's will compile your Code7.c file with MY versions of LinkLib.c, BSTLib.c, QueueLib.c and StackLib.c. Since you are required to use the provided header files, your code should compile and function with a different version of the .c modules of the libraries. It will be VERY important that you only put BST/Queue/Linked list/Stack handling code inside your library functions. That is one of the purposes of libraries – being able to reuse them. Your Code7.c compiled with my libraries should continue to function as it did with your own versions.

1. The queue head, queue tail, binary search tree root and stack head will be declared in main() and passed as needed to other functions. No globals allowed.

2. Expand your makefile to compile all 5 files together.

3. Add the following includes to Code7.c

```
#include "QueueLib.h"
```

```
#include "BSTLib.h"
```

```
#include "ListLib.h"
```

```
#include "StackLib.h"
```

```
Code7_1000074079.e QUEUE=queue.txt ZIPFILE=zip.txt RECEIPTNUMBER=123
```

1. Sell tickets to next customer

2. See who's in line

3. See the seat map for a given theater

4. Print today's receipts

Choice : 2

Customer Queue

Bugs Bunny

Daffy Duck

Tweety

Elmer Fudd

Marvin the Martian

Sylvester

Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

How many movie tickets do you want to buy? 4

Pick a seat (Row Seat) d1

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9
Row A	X	X	X	O	X	O	O	O	O
Row B	O	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O
Row D	X	O	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

Pick a seat (Row Seat) d2

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9
Row A	X	X	X	O	X	O	O	O	O
Row B	O	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O
Row D	X	X	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O

Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

Pick a seat (Row Seat) d3

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9
Row A	X	X	X	O	X	O	O	O	O
Row B	O	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O
Row D	X	X	X	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

Pick a seat (Row Seat) d4

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9
Row A	X	X	X	O	X	O	O	O	O
Row B	O	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O
Row D	X	X	X	X	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

Thank you Bugs Bunny - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 4

Today's receipts

Receipt #123

AMC The Parks At Arlington 18

D1	D2	D3	D4
----	----	----	----

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Daffy Duck

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017
Studio Movie Grill Arlington	76018
Rave	76053

Enter zip 76053

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	O	O	O	O	O	O	O	O
Row B	O	O	O	O	X	X	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O	O
Row G	O	O	O	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O	O
Row J	X	X	X	O	O	O	O	O	O	O

How many movie tickets do you want to buy? 4

Pick a seat (Row Seat) j4

Seat1 Seat2 Seat3 Seat4 Seat5 Seat6 Seat7 Seat8 Seat9 Seat10

Row A	X	X	O	O	O	O	O	O	O	O
Row B	O	O	O	O	X	X	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O	O
Row G	O	O	O	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O	O
Row J	X	X	X	X	O	O	O	O	O	O

		Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row	A	X	X	O	O	O	O	O	O	O	O
Row	B	O	O	O	O	X	X	O	O	O	O
Row	C	O	O	O	O	O	O	O	O	O	O
Row	D	O	O	O	O	O	O	O	O	O	O
Row	E	O	O	O	O	O	O	O	O	O	O
Row	F	O	O	O	O	O	O	O	O	O	O
Row	G	O	O	O	O	O	O	O	O	O	O
Row	H	O	O	O	O	O	O	O	O	O	O
Row	I	O	O	O	O	O	O	O	O	O	O
Row	J	X	X	X	X	X	O	O	O	O	O

[illegible]

Row F	O	O	O	O	O	O	O	O	O	O
Row G	O	O	O	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O	O
Row J	X	X	X	X	X	X	O	O	O	O

Pick a seat (Row Seat) j7

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	O	O	O	O	O	O	O	O
Row B	O	O	O	O	X	X	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O	O
Row G	O	O	O	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O	O
Row J	X	X	X	X	X	X	X	O	O	O

Thank you Daffy Duck - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Tweety

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017
Studio Movie Grill Arlington	76018
Rave	76053

Enter zip 76015

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9
Row A	X	X	X	O	X	O	O	O	O
Row B	O	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O
Row D	X	X	X	X	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

How many movie tickets do you want to buy? 1

Pick a seat (Row Seat) b1

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9
Row A	X	X	X	O	X	O	O	O	O
Row B	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O
Row D	X	X	X	X	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O
Row G	X	X	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O
Row J	O	O	X	O	O	O	O	O	X

Thank you Tweety - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Elmer Fudd

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120

AMC Palace 976102

Studio Movie Grill76011

Movie Tavern at Green Oaks76017

Studio Movie Grill Arlington76018

Rave76053

Enter zip 76011

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O	O	O	X

How many movie tickets do you want to buy? 4

Pick a seat (Row Seat) d1

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	X	O	O	O	O	O	O	O	O	X

Pick a seat (Row Seat) d1

Seat D-1 is not available.

Seat1Seat2Seat3Seat4Seat5Seat6Seat7Seat8Seat9Seat10

Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	X	O	O	O	O	O	O	O	O	X

Pick a seat (Row Seat) d2

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	X	X	O	O	O	O	O	O	O	X

Pick a seat (Row Seat) d3

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	X	X	X	O	O	O	O	O	O	X

Pick a seat (Row Seat) d5

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	X	X	X	O	X	O	O	O	O	X

Thank you Elmer Fudd - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice :

```
[frenchdm@omega CA7]$ make
```

```
gcc -c -g Code7_1000074079.c -o Code7_1000074079.o
```

```
gcc -g Code7_1000074079.o QueueLib.o BSTLib.o ListLib.o StackLib.o -o  
Code7_1000074079.e
```

```
[frenchdm@omega CA7]$ Code7_1000074079.e QUEUE=queue.txt ZIPFILE=zip.txt  
RECEIPTNUMBER=123
```

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Bugs Bunny

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120

AMC Palace 976102

Studio Movie Grill76011

Movie Tavern at Green Oaks76017

Studio Movie Grill Arlington76018

Rave76053

Enter zip 76017

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7
Row A	O	O	O	O	O	O	O
Row B	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O

How many movie tickets do you want to buy? 4

Pick a seat (Row Seat) a1

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7
Row A	X	O	O	O	O	O	O
Row B	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O

Pick a seat (Row Seat) s2

That is not a valid seat. Please choose again

Pick a seat (Row Seat) a2

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7
Row A	X	X	O	O	O	O	O
Row B	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O

Pick a seat (Row Seat) a3

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7
Row A	X	X	X	O	O	O	O
Row B	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O

Pick a seat (Row Seat) a4

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7
Row A	X	X	X	X	O	O	O
Row B	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O

Thank you Bugs Bunny - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 2

Customer Queue

Daffy Duck

Tweety

Elmer Fudd

Marvin the Martian

Sylvester

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Daffy Duck

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017
Studio Movie Grill Arlington	76018
Rave	76053

Enter zip 76102

	Seat1	Seat2	Seat3	Seat4
Row A	X	X	X	X
Row B	X	X	X	X
Row C	O	O	O	O
Row D	O	O	O	O
Row E	X	X	X	X

How many movie tickets do you want to buy? 3

Pick a seat (Row Seat) c1

	Seat1	Seat2	Seat3	Seat4
Row A	X	X	X	X
Row B	X	X	X	X

Row C	X	O	O	O
Row D	O	O	O	O
Row E	X	X	X	X

Pick a seat (Row Seat) c2

	Seat1	Seat2	Seat3	Seat4
Row A	X	X	X	X
Row B	X	X	X	X
Row C	X	X	O	O
Row D	O	O	O	O
Row E	X	X	X	X

Pick a seat (Row Seat) c3

	Seat1	Seat2	Seat3	Seat4
Row A	X	X	X	X
Row B	X	X	X	X
Row C	X	X	X	O
Row D	O	O	O	O
Row E	X	X	X	X

Thank you Daffy Duck - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 2

Customer Queue

Tweety

Elmer Fudd

Marvin the Martian

Sylvester

- 1. Sell tickets to next customer
- 2. See who's in line
- 3. See the seat map for a given theater
- 4. Print today's receipts

Choice : 1

Hello Tweety

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017

Studio Movie Grill Arlington76018

Rave76053

Enter zip 76011

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	X	X	X	O	X	O	O	O	O	X

How many movie tickets do you want to buy? 1

Pick a seat (Row Seat) c1

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	X	X	O	O	O	O	O	O	O
Row B	X	X	O	O	O	O	O	O	O	O
Row C	X	O	O	O	O	O	O	O	O	O
Row D	X	X	X	O	X	O	O	O	O	X

Thank you Tweety - enjoy your movie!

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Elmer Fudd

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017
Studio Movie Grill Arlington	76018
Rave	76053

```
Enter zip 76120
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[illegible]

How many movie tickets do you want to buy? 1

Pick a seat (Row Seat) a1

	Seat1	Seat2	Seat3	Seat4	Seat5	Seat6	Seat7	Seat8	Seat9	Seat10
Row A	X	O	O	O	O	O	O	O	O	O
Row B	O	O	O	O	O	O	O	O	O	O
Row C	O	O	O	O	O	O	O	O	O	O
Row D	O	O	O	O	O	O	O	O	O	O
Row E	O	O	O	O	O	O	O	O	O	O
Row F	O	O	O	O	O	O	O	O	O	O
Row G	O	O	O	O	O	O	O	O	O	O
Row H	O	O	O	O	O	O	O	O	O	O
Row I	O	O	O	O	O	O	O	O	O	O
Row J	O	O	O	O	O	O	O	O	O	O

Thank you Elmer Fudd - enjoy your movie!

- 1. Sell tickets to next customer
- 2. See who's in line
- 3. See the seat map for a given theater
- 4. Print today's receipts

Choice : 1

Hello Marvin the Martian

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017
Studio Movie Grill Arlington	76018
Rave	76053

Enter zip 76018

	Seat1	Seat2	Seat3	Seat4
Row A	O	O	O	O
Row B	O	O	O	O
Row C	O	O	O	O
Row D	O	O	O	O
Row E	O	O	O	O
Row F	O	O	O	O
Row G	O	O	O	X

How many movie tickets do you want to buy? 2

Pick a seat (Row Seat) a1

	Seat1	Seat2	Seat3	Seat4
Row A	X	O	O	O
Row B	O	O	O	O
Row C	O	O	O	O
Row D	O	O	O	O
Row E	O	O	O	O

Row F	O	O	O	O
Row G	O	O	O	X

Pick a seat (Row Seat) b1

	Seat1	Seat2	Seat3	Seat4
Row A	X	O	O	O
Row B	X	O	O	O
Row C	O	O	O	O
Row D	O	O	O	O
Row E	O	O	O	O
Row F	O	O	O	O
Row G	O	O	O	X

Thank you Marvin the Martian - enjoy your movie!

- 1. Sell tickets to next customer
- 2. See who's in line
- 3. See the seat map for a given theater
- 4. Print today's receipts

Choice : 2

Customer Queue

Sylvester

1. Sell tickets to next customer
2. See who's in line
3. See the seat map for a given theater
4. Print today's receipts

Choice : 1

Hello Sylvester

Pick a theater by entering the zipcode

AMC The Parks At Arlington 18	76015
AMC Dine-In Clearfork 8	76109
AMC EastChase 9	76120
AMC Palace 9	76102
Studio Movie Grill	76011
Movie Tavern at Green Oaks	76017
Studio Movie Grill Arlington	76018
Rave	76053

Enter zip 76109

	Seat1	Seat2	Seat3	Seat4	Seat5
Row A	X	X	X	O	O
Row B	O	O	O	O	O
Row C	O	O	O	O	O
Row D	O	O	O	O	O

Row E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row F	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row G	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row H	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How many movie tickets do you want to buy? 2

Pick a seat (Row Seat) a4

	Seat1	Seat2	Seat3	Seat4	Seat5
Row A	X	X	X	X	<input type="radio"/>
Row B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row F	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row G	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row H	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pick a seat (Row Seat) a5

	Seat1	Seat2	Seat3	Seat4	Seat5
Row A	X	X	X	X	X
Row B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row F	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row G	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Row H	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you Sylvester - enjoy your movie!

Good job - you sold tickets to all of the customers in line.

Today's receipts

Receipt #128

AMC Dine-In Clearfork 8

A4 A5

Receipt #127

Studio Movie Grill Arlington

A1 B1

Receipt #126

AMC EastChase 9

A1

Receipt #125

Studio Movie Grill

C1

Receipt #124

AMC Palace 9

C1 C2 C3

Receipt #123

Movie Tavern at Green Oaks

A1	A2	A3	A4
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