**Input Data**

1 number of cases.

In case one:

1. number of customers.

2. integer representing time (seconds) of entry to the line.

3. **Queue Number** number of line that customers step into.

4. name on the customer (String''0-9 chars”)

5. the number of items in the customer's cart.

**Implementation In Data reading.**

**1. Struct ﻿customer** ﻿(name, number of items, line number, time entering line).

**2. Node Struct** for linked list of customers. Has pointer of type struct customer and struct node.

**3. struct for Queue. Two pointers** one for the **back** and one for the **end**.

4. all formed line are stored in array of size 12.

4. dynamic allocation for the linked list.

6. **Enqueue**

7. **dequeue**

8.**Peek**(﻿Return the front of the queue WITHOUT removing it)

9.**Empty**

8. free memory.

Can be in Function getNextCustomer (pointer to the queue){

Check if line is empty

If not keep the customer who has less items.

Return customer.

CheckOut

-Get the first customer in line-

Who has less items

If equal (the shorter line)

* **If empty the line is ignored**
* **Check out time is ﻿30 + numberOfItems\*5+ plus time that he got into the line.**