ASSIGNMENT 6

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AIM:
Make an event driven simulation of various event happening at a bank.

IMPLEMENTATION:
The data structure used is Linked List.
There are 2 Linked List:

tellerQueue: Which manages the customers.
This is a simple linked list in which addition of customers always occurs at the tail and deletion occurs at the head.

eventQueue: Which manages all the events.
It is a special linked list. It is always sorted in terms of time. Since the event is always sorted so addition(such that the result list is also sorted) is done in O(n).

First the simulation is done for Multiline Queue, i.e one line for each teller. The statistics for the same is printed thereafter. Then Common Queue simulation is done.

Regarding the GNUPLOT of average time spent by a customer vs no of teller, it is done for no_of_teller = 1 to 10 with rest data remaining same as that for the previous simulation. It is a histogram plot.