Kaylee's Net Position: Short 373540

1. If orders.csv contains N entries, and the average number of bids / offers on order book is M, what is the time complexity of your solution?

Ans: O(NlogM)

2. Why do you consider your solution efficient or can you think of anything to improve performance?

Ans: Following performance improvements are possible:

- Remove dependency on generic PriorityQueue class from Java library: Instead use a custom heap data structure. This would remove the need for the LimitOrderComparators as comparison logic could be embedded in the heap's basic operations itself.
- Record trades only if a trader of interest is involved: In the current implementation, the TraderMap (Stores mappping between a trader and his current position) is updated every time a trade occurs. Since we are interested only in Kaylee's position, recording other trades can be avoided.