To: Stephen Osiru
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Title: Daily reports

## Summary of Activities

- Given a challenge on trapping rain water. I found multiple solutions but they failed some tests. My first implementation used a 3 pointer algorithm to implement a local minimum process. I later implemented a solution that takes the highest wall to the left and right of the current node and just subtracts the height of the current node.
- Completed the content on stacks and queues. Learned about first in first out, last in last out, queueing, dequeuein, stacking and unstacking.
- Started on Trees. Learned about the efficiency of get, remove add. The trees have a search efficiency of o(log n) as most of these operations are dependent on the depth of the tree and not the number of elements.
- Attended the city hall meeting. Learned about the company dress-code, performance goals, reflecting on the past and tracking what is consuming most of my daily time. The meeting devotion was lead by the CTO.

## Challenges Faced

- Translating imagery to code. I spent a lot of time correcting my algorithms for trapping water as they kept on running into testing errors. It took understanding that my thought process of a local minimum was wrong and I needed to focus on the highest walls around then just taking out the height of the current wall.

## Key Outcomes

1. Joined Leet code
2. Completed my algorithm on trapping water and ran my first test

3. Completed the content on stacks and ques
4. Started training on tree data structures.