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Title: Daily Report

Summary of Activities

- Completed some LeetCode exercise. I tried to resolve a challenge I faced picturing the functionality of stacks and queues by implementing the add two numbers problem on LeetCode. This helped in understanding push and pop in stacks,and enqueue and dequeue in queues.
- Completed lessons on depth first search(DFS) and breath first search(BFS). Understood the different types of DFS; per-order where we visit the current node and print it, go left and print that then print the left come back to the parent then print the right node. Second, in-order go to the left most sub-tree print its left child print it then its parent node and finish with its right child, repeat this until the right most sub-tree right child is printed. Finally, post-order which works best for deleting where children are removed before the sub-tree parent is removed by starting from left most sub-tree.
- Implemented a binary search tree(BST). I got inspiration from LeetCode to created a node only implementation. I then created an Object based implementation. Learned about divide and conquer.
- Learned about recursion. Through the concept of code stacking I was able to demystify the concepts of recursion.

Challenges Faced

- Learning recursion without first understanding code stacking. Consumed a lot of time trying to picture the logic of recursion

Key Outcomes

1. Completed BST training

2. Completed LeetCode challenges
3. Understood the concept of recursion
4. Implemented a BST using just a Node object and a BST Object