

## Week 6 (Data Structures - Week 3)

**Name:**

**Mobile:**

Data Structure Workouts
<ol style="list-style-type: none"><li>1. Learn the concepts of Tree. Complete at least three sample workouts.</li><li>2. Learn the concepts of Binary Search Tree. Complete at least three sample workouts. Example:<ol style="list-style-type: none"><li>a. Create a Binary Search Tree with insertion, contains, delete, three traversals ( postorder, preorder, in order).</li><li>b. Find the closest value to a given number in a Tree.</li><li>c. Validate whether a given tree is BST or not.</li></ol></li><li>3. Learn the concepts of Heap. Complete at least three sample workouts. Example:<ol style="list-style-type: none"><li>a. Create a min heap &amp; max heap with build, insert, remove.</li></ol></li><li>4. Learn the concept of Heap sort. Complete at least three sample workouts</li><li>5. Learn the concepts of Trie. Complete at least 3 sample workouts.</li><li>6. Learn the concepts of Graph. Complete at least three sample workouts.</li><li>7. Learn the concepts of Graph traversals (BFS, DFS).</li><li>8. Do at least 3 problems each for every structure from any competitive coding websites</li><li>9. Learn about the applications of all structures you covered this week</li></ol>
<p><i>Write a short description about this task</i></p> <p><i>Link to the folder containing code and screenshot of the output</i></p>
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