



## Assignment: Data Structures Mastery on LeetCode

### **Personal Information (First Page):**

- Your Name
- Student ID
- Course Name (Section)
- Instructor Name
- Department Name
- University Name
- Logos of the Department and University (copy from this file)

### **Table of Contents (Second Page):**

- Contents with Page Numbers

### **Task Presentation (Starting from Third Page Onwards):**

#### **Topic 1: Arrays**

- Task 1: Screenshot and Code
- Task 2: Screenshot and Code
- Task 3: Screenshot and Code
- Task 4: Screenshot and Code
- Task 5: Screenshot and Code

#### **Topic 2: Strings**

- Task 11: Screenshot and Code
- Task 12: Screenshot and Code
- Task 13: Screenshot and Code
- Task 14: Screenshot and Code
- Task 15: Screenshot and Code

#### **Topic 3: Linked Lists**

- Task 6: Screenshot and Code
- Task 7: Screenshot and Code
- Task 8: Screenshot and Code
- Task 9: Screenshot and Code
- Task 10: Screenshot and Code

#### **Topic 4: Stacks**

- Task 11: Screenshot and Code
- Task 12: Screenshot and Code

- Task 13: Screenshot and Code
- Task 14: Screenshot and Code
- Task 15: Screenshot and Code

#### **Topic 5: Queues**

- Task 11: Screenshot and Code
- Task 12: Screenshot and Code
- Task 13: Screenshot and Code
- Task 14: Screenshot and Code
- Task 15: Screenshot and Code

#### **Topic 6: Trees and Graphs**

- Task 16: Screenshot and Code
- Task 17: Screenshot and Code
- Task 18: Screenshot and Code
- Task 19: Screenshot and Code
- Task 20: Screenshot and Code

#### **Topic 7: Hashing and Sorting**

- Task 21: Screenshot and Code
- Task 22: Screenshot and Code
- Task 23: Screenshot and Code
- Task 24: Screenshot and Code
- Task 25: Screenshot and Code

#### **Submission Guidelines:**

- Submit a single word and its PDF version file with the specified format.
- The assignment can be done in a group of a maximum of two students.
- Ensure the correctness of code (text format) and clarity of screenshots.
- Use appropriate headings and labels for each task and topic.
- Follow the order of topics and tasks as mentioned in the assignment.
- Plagiarism is strictly prohibited. If caught, zero marks will be assigned for the entire assignment for all involved students.
- After submission, be prepared for a viva session where you may be called to explain your solutions and demonstrate understanding of the tasks.

#### **Note:**

- Make sure to replace placeholders (like "Your Name," "Student ID," etc.) with your actual information.
- Provide complete and working code for each task.
- Include any additional explanations or comments if needed for better understanding.