

# Mastering Competitive Programming Lab

## Student Lab Work Submission Template

Every Lab document must be written as per following structure.

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**Lab No:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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### 1. Aim

Clearly state the objective of the experiment.

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### 2. Problem Statement

**LeetCode Problem No.:** \_\_\_\_\_

**Problem Title:** \_\_\_\_\_

**Problem Statement:** \_\_\_\_\_

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### 3. Approach / Algorithm

Explain the logic used to solve the problem in your own words.

- Describe the main idea of the solution
- Mention why a brute-force approach is not efficient
- Specify the data structure or algorithm used

*(5–10 lines explanation is sufficient.)*

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### 4. Code Implementation

Write or paste the complete working code that was submitted on LeetCode.

// Write your code here

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### 5. Sample Input and Output

**Sample Input:**

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**Sample Output:**

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## **6. Time and Space Complexity**

- **Time Complexity:** \_\_\_\_\_
- **Space Complexity:** \_\_\_\_\_

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## **7. Submission Proof**

Paste a screenshot showing **Accepted** status on LeetCode.

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## **8. Answers to Key Questions**

*(Answer the questions provided by the instructor related to this lab.)*

1.

2.

3.

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## **Conclusion / Learning Outcome**

Write 2–3 lines describing what you learned from this experiment.

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