PARALLEL AND SEQUENTIAL ALGORITHMS AND DATA STRUCTURES

LAB COURSE 2
Report Submission Guideline

TOPIC and Reference OF THIS COURSE

http://www.cs.cmu.edu/~15210/

https://www.educoder.net/shixuns/8jpoevi9/challenges?homework_common_id=2994349

This course covers

– **Standard ML**, a functional programming language.

– learning to **describe algorithms using SML** for solving problems.

– reusing **abstract data types** to build complex algorithms.

– analyzing and comparing **the cost of algorithms and data structures**

Lab Report Requirements

- **Mandatory Rules**
  - **Contents, Dates, and Submission Requirements**

- **Recommendations**
  - Discussion, Typesetting, etc.

- **General Notes**
  - Typesetting, Cover page, etc.

Mandatory Rules

- **Contents should include all 9 problems in the semi-skilled SML problem set.**
  - **Problem Statements**
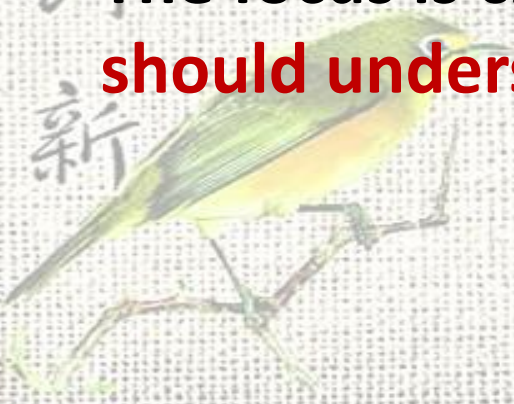 - **Algorithm Design**
  - **Complexity**
  - **Demonstration Example**

Mandatory Rules

- **Problem Statement and Algorithm Design**
  - Describe each problem in natural language
  - Explain your algorithm workflow in natural language.
  - The focus is clarity: even someone unfamiliar with the problem should understand your explanation.

Mandatory Rules

- **Complexity and Demonstration Example**
  - Prove time and space complexity; if full proof is hard, give an upper bound.
  - Provide at least one worked example with sample data.
  - Show step-by-step computation to demonstrate your algorithm in action.

Mandatory Rules

- **Dates**

THE SUBMISSION DEADLINE IS **DEC. 7TH CST**
LATE SUBMISSION WILL RESULT IN A **GRADE REDUCTION.**

Mandatory Rules

- **Submission Site: https://hust-psdsa25.hotcrp.com**

HUST PSDSA Fall 2025

Welcome to the Fall 2025 Parallel and Sequential Data Structures and Algorithms Lecture Report (HUST PSDSA Fall 2025) submissions site.

Submissions

New submission   Deadline: Monday Dec 8, 2025, 5:59:59 AM UTC (1:59:59 PM your time)

Recommendations

- **Use flowcharts for complex algorithms**

- **Describe special-case behaviors**

- **Improve readability: spacing, fonts, neat layout.**
  - **Chinese: SimSun (宋体)**
  - **English: Times New Roman**
  - **Code: monospaced (Consolas, Courier New)**

- **Use algorithmicx or algorithm2e in LaTeX for algorithms.**

- **Learn LaTeX if possible (widely used for academic papers).**

Notes

- **No strict word limit.**
  - Keep it informative but not overly long.
- **Don't paste full code unless necessary.**
  - Use snippets only for key points.