# Algorithm Design and Analysis LAB Introduction

TIAN LEI

# About me& SAs

https://bb.sustech.edu.cn/webapps/blackboard/content/listContentEditable.jsp?content_id=_443450_1&course_id=_6137_1&mode=reset

# Knowledge, Ability and Skill Requirements

▶ Algorithmic Learning : Proficiency in the presentation, solution and proof of algorithmic problems described in textbook.

▶ Algorithmic Description: Ability to describe the process of algorithms using flow chart, pseudocode or other methods.

▶ Algorithmic Implementation: Ability to Implement Algorithms.

▶ Algorithmic Design and Analysis: Ability to design algorithms for given problems and prove their correctness, analyze their time and space complexity

# Content

- Explanation of key knowledge points
- Do some exercises
- Solutions of lab assignments and exercises or other extended questions
- Collect and explain the most concentrated problems
- Experience sharing

# Requirements Of Theory Assignments

▶ Mr. Shi will assign theory assignments at irregular intervals. Please submit your theory assignments on time.

▶ Theory assignments will be posted on **BB worksite:**

   **Algorithm Design and Analysis SE1 Spring 2024**.

▶ You can write assignments by hand, in word, or markdown, but submit a pdf file.

▶ **Only one DDL. No late submission is allowed. (Submissions later than DDL will not be accepted.). If exceed the DDL, the score of the assignment will be 0.**

▶ Please **submit your assignment in advance** so as not to submit fail or exceed DDL.

▶ **Don't copy**, you **can't copy online reference answers**, you **can't copy other students' homework**.

▶ **Assignment:20%**

# Requirements Of Lab Assignments

▶ Due to the free withdrawal of the first three weeks, the DDL of all lab and theory assignments in the first two weeks will start from the fourth week. (that is, **The DDL will not be earlier than Mar. 11**.) But all the students have the same criteria. Since the students who are expected to take this course, they should submit lab and theory assignments on time. They should not delay submission time due to the late course selection.

▶ Only one lab assignment a week, only one DDL. Each assignment contains two questions, except for the first three weeks. **Late submissions are not allowed**. (Submissions later than DDL will not be accepted.). **If exceed the DDL, the score will be 0**.

▶ Please **submit your assignment in advance** so as not to submit fail or exceed DDL.

▶ All important notices are sent on BB platform.

# Introduction to lab assignments

▶ This course is intended to judge the lab assignments online, which requires that you should strictly comply with the requirements of the question. We will supply a complete and clear description of the question, as well as the format of input and output.

▶ In order to encourage students to **do the right thing right the first time**, the second question will be penalized if you submit your code **more than two times**. If your first two submissions can pass all the test cases, you will get the full score; otherwise, according to the number of submissions, the score will **be deducted 5 points per submission**. The final grade is the best grade you have achieved.

▶ An example:

✓ If you pass 60% test cases at first submit or the second submit, you can get 60.

✓ At the third submit, you pass 95% cases, you will get 95-5 = 90.

✓ At the fourth submit, you pass 90% cases, you will get 90-10 = 80. Finally, you will get 90.

▶ If we find some problems in our own code or system, we will fix these problems as soon as possible, the number of submissions of all participants will be reset to 0 accordingly.
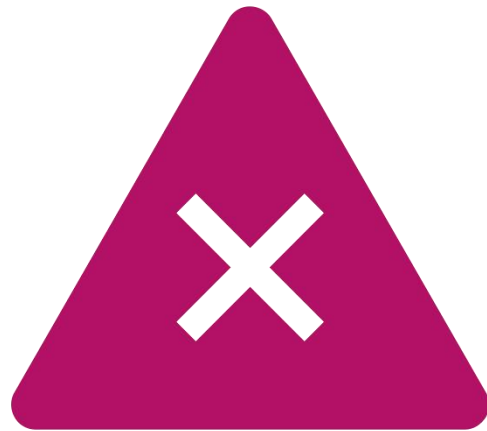
# Plagiarism Policy

- **From Spring 2022**, the plagiarism policy applied by the Computer Science and Engineering department is the following:

  - **\* If an undergraduate assignment is found to be plagiarized, the first time the score of the assignment will be 0.**

  - **\* The second time the score of the course will be 0.**

  - **\* If a student does not sign the Assignment Declaration Form or cheats in the course, including regular assignments, midterms, final exams, etc., in addition to the grade penalty, the student will not be allowed to enroll in the two CS majors through 1+3, and cannot receive any recommendation for postgraduate admission exam exemption and all other academic awards.**

- As it may be difficult when two assignments are identical or nearly identical who actually wrote it, the policy will **apply to BOTH students**, unless one confesses having copied without the knowledge of the other.

# What is OK, and what isn't OK?

▶ It's OK to work on an assignment with a friend, and think together about the program structure, share ideas and even the global logic. At the time of actually writing the code, you should write it alone.

▶ It's OK to use in an assignment a piece of code found on the web, as long as you indicate in a comment where it was found and don't claim it as your own work.

▶ It's OK to help friends debug their programs (you'll probably learn a lot yourself by doing so).

▶ It's OK to show your code to friends to explain the logic, as long as the friends write their code on their own later.

▶ **It's NOT OK to take the code of a friend, make a few cosmetic changes (comments, some variable names) and pass it as your own work.**

No excuse will be accepted once plagiarism is discovered!

# Assignment 0

Please submit **Assignment 0 (Assignment Declaration Form** ) toBB **before the deadline: Mar.11, 2024 23:55 pm**, otherwise, you will lose all points for class performance.