Session 0
Course Orientation

🗎 Lecture Summary

Course Introduction and Motivation

- Why study "Analysis and Design of Algorithms"?
- Course information and expectations

What is an "Algorithm"?

1. The definition
2. Place in computer science
3. Preparation for "thinking about the definition" next class

First Exercise

Discuss the session exercise.

🗎 Session Exercise

P1. Run the sorting performance study in the course website start page and compare.

Detailed instructions
- Go through the programming startup guide
- Run the exercise for list sizes: 800, 1500, 10000, 20000, 50000, 100000
- Record sort run time in milliseconds for each case using the timing in the **Console** panel
- Comment out `quicksort()` line in *sortdemo.js* and repeat for bubble sort
- For each size, you will have 2 run times, one from each sort. Calculate a *speedup* for each pair (divide the larger run time by the smaller)
- Organize results in a table (hint: use Excel)
- Write a conclusion based on your experience and findings

   👁 Why get a new run time for the *same* case whenever the script is re-run (page refreshed)?

- Upload a PDF of results table and a conclusion paragraph

🗎 Reading List

- 1-page course syllabus
- 📖 1.1

🗎 Keywords

Algorithm