Course Orientation

Contact information

‣ Lecturer: Dr. Min-Zheng Shieh

  ‣ E-mail: mzshieh@nctu.edu.tw

‣ Lecturer's website:

  ‣ https://sites.google.com/site/mzshieh/

‣ Head TA: Yin Lee

  ‣ E-mail: enyazoroism@gmail.com

Prerequisites

‣ Programming language
  ‣ C
  ‣ C++
  ‣ JAVA
‣ Basic knowledge about data structures

Textbook & References

‣ Textbook

   ‣ Cormen, Leiserson, Rivest and Stein, Introduction to Algorithms 3rd edition, 2009, MIT press.

   ‣ Handouts

Topics in this Course

‣ Growth of functions

‣ Recurrences

‣ Sorting & order statistics

‣ Divide & conquer

‣ Dynamic programming

‣ Greedy algorithms

‣ Amortized analysis

‣ Advanced data structures

Topics in this Course

▸ Graph traversal algorithms

▸ Minimum spanning trees

▸ Shortest paths

▸ Linear programming

▸ Flow networks

▸ Fast Fourier transform

▸ Selected topics

Grading policy

‣ Programming assignments: 50%

‣ Midterm: 20%

‣ Final: 30%

‣ Bonus: TBD

‣ IMPORTANT: No adjustment!

Programming assignments

‣ 6 topics
 ‣ Divide and conquer
 ‣ Dynamic programming
 ‣ Greedy algorithms
 ‣ Graph traversal
 ‣ Shortest paths
 ‣ Flow networks

Programming assignments

‣ 3 problems in each topic

‣ 5 points for each problem

‣ At most 10 points for each topics

‣ At most 45 points for any five topics

‣ It means you have to solve at least one problem from every topic to get all 50 points.

Programming assignments

‣ **Deadline of topic 1:** 23:59 Mar 9

‣ IP: `140.113.208.57`

‣ Port: `21`

‣ Username: `Algo2014`

‣ Password: `u;6c065/4`

‣ How to remember password: 楊涵正

‣ Make your TAs happy: try passwords 李殷超正, 伯軒帥, and 柏瑄好帥.