

Final Exam Review

5QWBC

- Time: Tues ~~12th~~ 6:30pm - 9pm
- In person
- paper-based
- Electronic - submission
- place SG216

Questions

- Big 4 Questions

- subquestions (M/C, T/F, open-ended)

- Topics - everything

- Substitution Method / Master's Theorem
(no recursion tree)

- ~~p~~-codes

- Demonstration

- loop invariants

} skills

Topics

- Sorting algo.
 - characteristics, properties, procedures, etc. [data type (list or set),
stability]
 - pro + cons
 - cases (best, worst, average)
 - ^{no} proof

Counting

$$A = [1, 2, 1, 2]$$

$$C = [0, 2, 4]$$

$$A[2] = 2, \quad C[2] = 4$$

$$B[4] = 2$$

$$B = [\quad \quad \quad 2]$$

$$C = [0, 2, 3]$$

- BST & RBT

- colors \Rightarrow RBT: self-balance of BST.

\hookrightarrow by black height

- properties of BST

- properties of RBT

- Insertion & Deletion (cases)

- Successor vs Predecessor.

- Optimization
 - Dynamic
 - global solution

- Greedy
 - local solutions

- LCS, SW, Optimal BST,

