

Recitation 12 – 42 (a.k.a. Exam II Review)

Parallel and Sequential Data Structures and Algorithms, 15-210 (Spring 2014)

April 1st, 2014

1 Announcements

- Exam II is on Friday during lecture!
- To help you prepare, looks like we **accidentally** emailed you solutions to the exam. Uh, oops.
- No lab this week to let you study for the exam. *RangeLab* will go out next Monday.

2 Logistics

Q: Where will the exam take place?

A: Rashid, as usual.

Q: When will the exam take place?

A: Friday, 12 – 1:20pm, as usual.

Q: Is the exam cumulative?

A: Yes, but perhaps no. But actually, yes.

Q: Am I allowed a cheatsheet?

A: YES. 1 sheet (letter... no exotic paper sizes please!) double-sided. Don't just use the same cheatsheet as Exam 1!

Q: Is it going to be hard?

A: You bet it is. It's a learning experience! Don't worry, study hard, and you'll be perfectly fine. Most importantly, HAVE FUN!

3 Topics

- Graph Representations
- BFS and Applications
- DFS and Applications
- DFS Numberings
- Topological Sorting
- Dijkstra's Algorithm
- Bellman-Ford Algorithm
- Graph Contractions (Edge, Tree, and Star contraction)
- Lightest-Edge Rule
- Minimum Spanning Trees (Prim's, Kruskal's, Borůvka's Algorithms)
- Binary Search Trees
- Treaps (Randomized)
- All the labs from ThesaurusLab \rightarrow SegmentLab
- Don't forget the **main concepts** from Exam 1!