

**Problem Set 7 — Minimum Spanning Trees and Single Source Shortest Paths**  
**Due by 4:30pm Friday, March 30, 2018 as a single pdf via Moodle (either generated via L<sup>A</sup>T<sub>E</sub>X, or concatenated photos of your work). Late assignments are not accepted.**

This is an *individual* assignment: collaboration (such as discussing problems and brainstorming ideas for solving them) on this assignment is highly encouraged, but the work you submit must be your own. Give information only as a tutor would: ask questions so that your classmate is able to figure out the answer for themselves. It is unacceptable to share any artifacts, such as code and/or write-ups for this assignment. If you work with someone in close collaboration, you must mention your collaborator on your assignment.

*Suggested practice problems, from CLRS: 23.1-3; 23.1-6; 23.2-4; 23.2-5; 24.1-1*

1. Problem 23.1-1 from CLRS.
2. Problem 23.2-8 from CLRS.
3. Problem 24.1-6 from CLRS. *Hint: Consider running Bellman-Ford more than once.*
4. Problem 24.3-4 from CLRS.