

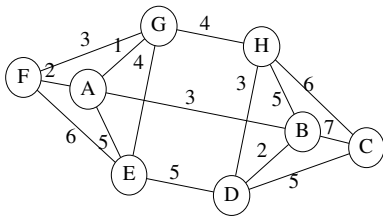
Today: Minimum spanning trees. §§ 23.*.

Next class: Single-source shortest paths. §§ 24.*.

Reminders: Term-project proposals due Tue. Quiz on Thu. next week.

1. List the members of your group below. Underline your name.

2. Trace the execution of Kruskal's minimum spanning tree algorithm on the following graph, using the textbook's Fig. 23.4 (p. 632) as a model. Annotate shaded (selected) edges with a check mark and discarded edges with an X.



3. Trace the execution of Prim's minimum spanning tree algorithm on the above graph, with root vertex A, using the textbook's Fig. 23.5 (p. 635) as a model. Annotate shaded (selected) edges and vertices with check marks.

4. Informal homework: Augment the above traces with the states of the data structures at each step (union-find with union by rank for Q. 2 and binary heap for Q. 3).