

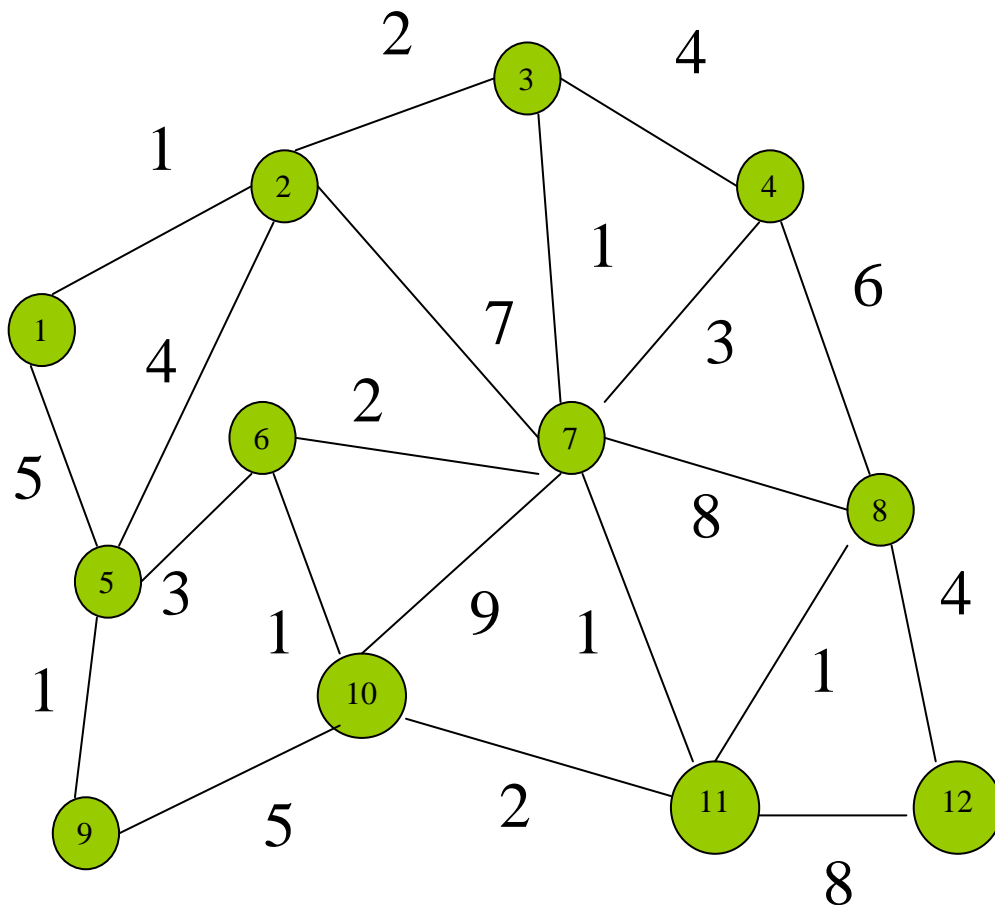
Tutorial Two

Exercise 1. (basic) For the interval scheduling problem (in week2's slides), the set of jobs (s_i, f_i) are as follows:

$(0, 6)$, $(1, 4)$, $(3, 8)$, $(2, 3)$, $(6, 9)$, $(4, 10)$, $(5, 11)$, and $(6, 7)$.

Use the greedy algorithm to give the maximum number of compatible jobs.

Exercise 2. (basic) Find a minimum spanning tree for the following graph using Kruskal's algorithm.



If there is still time, please consider the following problem. (hard)

Selecting Breakpoints

Selecting breakpoints.

- Road trip from Princeton to Palo Alto along fixed route.
- Refueling stations at certain points along the way.
- Fuel capacity = C .
- Goal: makes as few refueling stops as possible.

Greedy algorithm. Go as far as you can before refueling.

