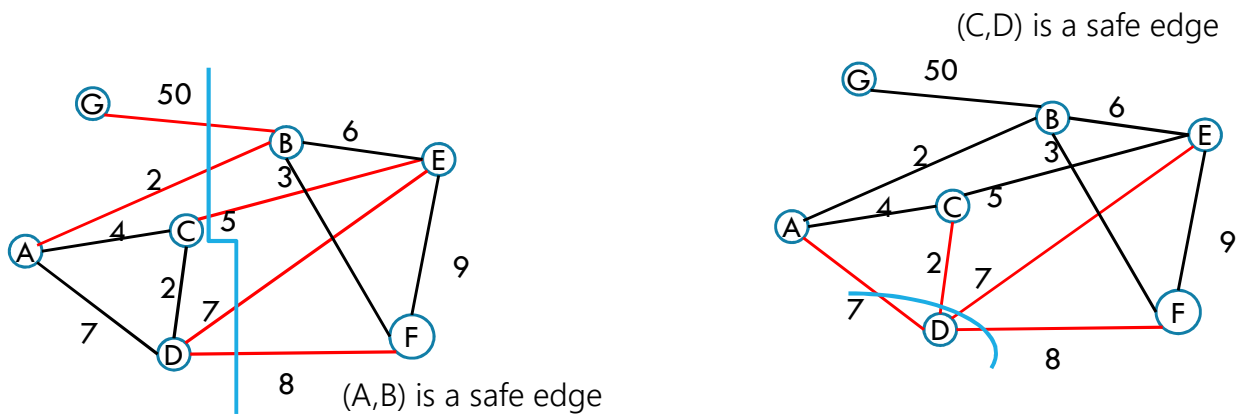


Safe Edge

Call an edge, e , a "safe edge" if there is some cut $(S, V \setminus S)$ where e is the minimum edge spanning that cut



Trip Planning

Your goal is to follow a pre-set route from New York to Los Angeles.

You can drive 500 miles in a day, but you need to make sure you can stop at a hotel every night (all possibilities premarked on your map)

You'd like to stop for the fewest number of nights possible – what should you plan?

Greedy: Go as far as you can every night.

Is greedy optimal?

Or is there some reason to "stop short" that might let you go further the next night?

Interval Scheduling

You have a single processor, and a set of jobs with fixed start and end times.

Your goal is to maximize the number of jobs you can process.

I.e. choose the maximum number of non-overlapping intervals.



Greedy Algorithm

Some possibilities

Earliest end time (add if no overlap with previous selected)

Latest end time

Earliest start time

Latest start time

Shortest interval

Fewest overlaps (with remaining intervals)