http://www.cs.unh.edu/~ruml/cs758
Some Problems
1. optimal substructure: global optimum uses optimal solutions of subproblems
2. ordering over subproblems: solve ‘smallest’ first, build ‘larger’ from them
3. ‘overlapping’ subproblems: polynomial number of subproblems, each possibly used multiple times
4. independent subproblems: optimal solution of one subproblem doesn’t affect optimality of another

- top-down: memoization
- bottom-up: compute table, then recover solution
Greedy

Make best *local* choice, then solve remaining subproblem.

Eg, optimal solution uses the greedy choice + optimal solution to remaining subproblem.

Unlike DP, haven’t already solved subproblems, don’t need to pick ‘best’ subsolution to use.
Problems

- longest increasing subsequence
- interval covering
- stack of boxes
- largest rectangle under the skyline
Break

Problems
- DP
- Greedy
- Problems
- Break
- EOLQs

- midterm
- schedule
- asst 7
- asst 8
For example:

- What’s still confusing?
- What question didn’t you get to ask today?
- What would you like to hear more about?

Please write down your most pressing question about algorithms and put it in the box on your way out.

*Thanks!*