Lecture 35

CSE 331

Nov 28, 2018

Quiz 2 on Monday

note ☆ stop following 88 views

Quiz 2

A gentle reminder that Quiz 2 is **next Monday (Dec 3) 8-8:10am** in class. The lecture will start at 8:15am.

Some other comments:

- Everything we would have covered till this Friday will be on the quiz
- There will be three questions:
  - The first two will be T/F without justification (like Q1 on sample final (@975))
  - The third question will be T/F with justification (like Q2 on sample final (@975))
- You can bring into **two** sheet of letter sized cheat-sheets (like the final exam)

#pin

quiz2

edit · good note | 0 Updated 1 day ago by Atri Rudra

Official Feedback forms

note

stop following 97 views

Incentive for filling in course evals

As I have done in the past few years, depending on the level of response on the official course evals, I will release come questions on the final exam. (See @975 to see what Q I mean below)

- If >=85% students submit the course evals, I will release **Q1(a)**
- If >=90% students submit the course evals, I will release **Q1(a) AND Q2(a)**

Some other relevant comments:

- I will post the current response rate in the comments section below every
- The % is based on current student registered (236): i.e. it does not include
- I believe this is the link to the course evals: https://sunyub.smartevals.com
  - But double check the email you might have received on this.

#pin

feedback

edit · good note | 1

Fall 2018 CSE 331LR LEC

Intro to Algorithms

Begins:	Ends:	Released:
11/23/2018	12/9/2018	12/28/2018

Students responded: 64 / 236

27% **response rate**

When to use Dynamic Programming

Richard Bellman

There are polynomially many sub-problems

$OPT(1), \ldots, OPT(n)$

Optimal solution can be computed from solutions to sub-problems

$$OPT(j) = \max \{ v_j + OPT(p(j)), OPT(j-1) \}$$

There is an ordering among sub-problem that allows for iterative solution

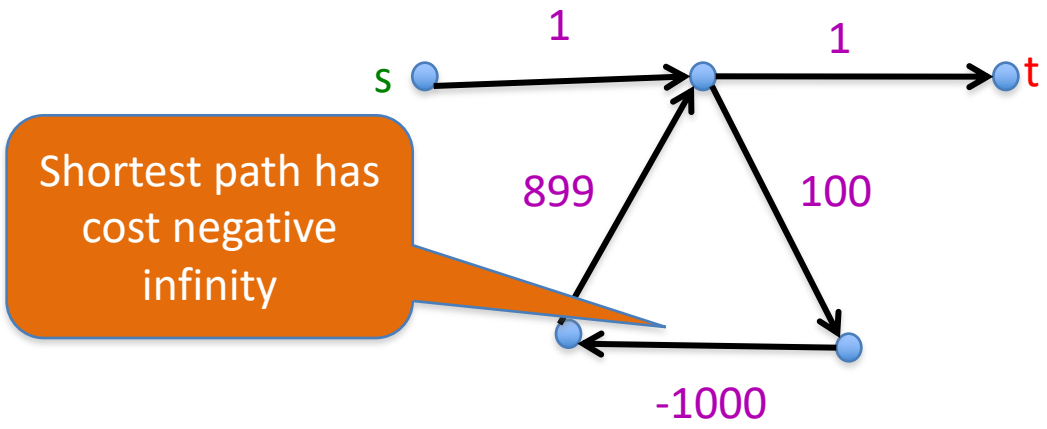
$OPT(j)$ only depends on $OPT(j-1), \ldots, OPT(1)$

Shortest Path Problem

Input: (Directed) Graph G=(V,E) and for every edge e has a cost c_e (can be <0)

t in V

Output: Shortest path from every s to t



Assume that G has no negative cycle

Today’s agenda

Dynamic Program for shortest path

May the Bellman force be with you