### Lecture 34

CSE 331 Nov 21, 2016

## Sample final exam posted

note 🚖	stop following	28 views
Sample final I have posted a sample final:		Actions -
http://www-student.cse.buffalo.edu/~atri/cse331/fall16/exams/sample-final.pdf		
as well as it solution:		
http://www-student.cse.buffalo.edu/~atri/cse331/fall16/exams/sample-final-soln.pdf		
You can also access the above from the nav bar in the 331 webpage.		
Some comments:		
<ul> <li>Unlike the sample mid-term, this is an actual final exam from one of the previous offerings. You can exp have similar level of difficulty</li> <li>Like the sample mid-term, the actual final exam have <b>exactly</b> the same format.</li> <li>Like the sample mid-term, you make deductions on the actual content of the final based on the sample peril.</li> </ul>	-	

I will put up a post on how to prepare for the final exam after the fall break. #pin



## Quiz 2 in two weeks

note 🚖	stop following	7 views
Quiz 2 in two weeks A gentle reminder that quiz 2 will be in class on Monday, December 5 from 1-1:10pm. The first two questions will be T/F without justification (so like two from Q1 on sample final- @735) and with justification (so like one from Q2 on sample final- @735). #pin	the third question will	be T/F
quiz2		
edit · good note 0	Jpdated 14 minutes ago t	oy Atri Rudra

# **Official Feedback forms**

# Incentive for filling in the course evaluations You must have received an email about filling the course evaluation forms. I believe this is the link: https://buffalo.campuslabs.com/courseeval/ Taking a leaf out of Geoff's playbook, here is my offer to incentivize you guys filling in the course evaluation form: If at least 85% c you fill in the course evaluation form, then I will release one T/F (without justification) question on the final exam (which correspond ts to Q1(a): see @735 for the format). If at least 95% c you fill in the course evaluation form, then I will release one T/F (without justification) question and one T/F (without justification) question (corresponding to Q1(a) and Q2(a) respectively: see @735 for the format).

Of course if < 85% of you fill in the course eval form, then no question gets released. The current percentage of you who have filled in the course evals is **3**% (so a bit to go). I will post weekly updates on the response rate.

### Couple of requests:

- · Please do let me know (via comments in the course evals) what you think I could do to improve CSE 331 for future students;
- Please let me know what worked well (or not) for you Autolab and other aspects of the CSE 331 webpage.

### CS Ed week (Dec 5)



with the Department of Computer Science and Engineering at UB:

Children K-12 are invited to:

**KID'S DAY** 

We need demos!

We'll need

volunteers!



### When to use Dynamic Programming



There are polynomially many sub-problems

OPT(1), ..., OPT(n)

**Richard Bellman** 

Optimal solution can be computed from solutions to sub-problems

OPT(j) = max {  $v_i$  + 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), ..., OPT(1)

# Scheduling to min idle cycles

n jobs, i<sup>th</sup> job takes w<sub>i</sub> cycles

You have W cycles on the cloud



What is the maximum number of jobs you can schedule?

### Today's agenda

Dynamic Program for Subset Sum problem

### May the Bellman force be with you

