

Lecture 38

CSE 331

May 5, 2021

Sample Final Exam

 note @1151    

Sample final exam

Sample final exam is finally available:

- [Sample final](#)
- [Sample final solutions](#)

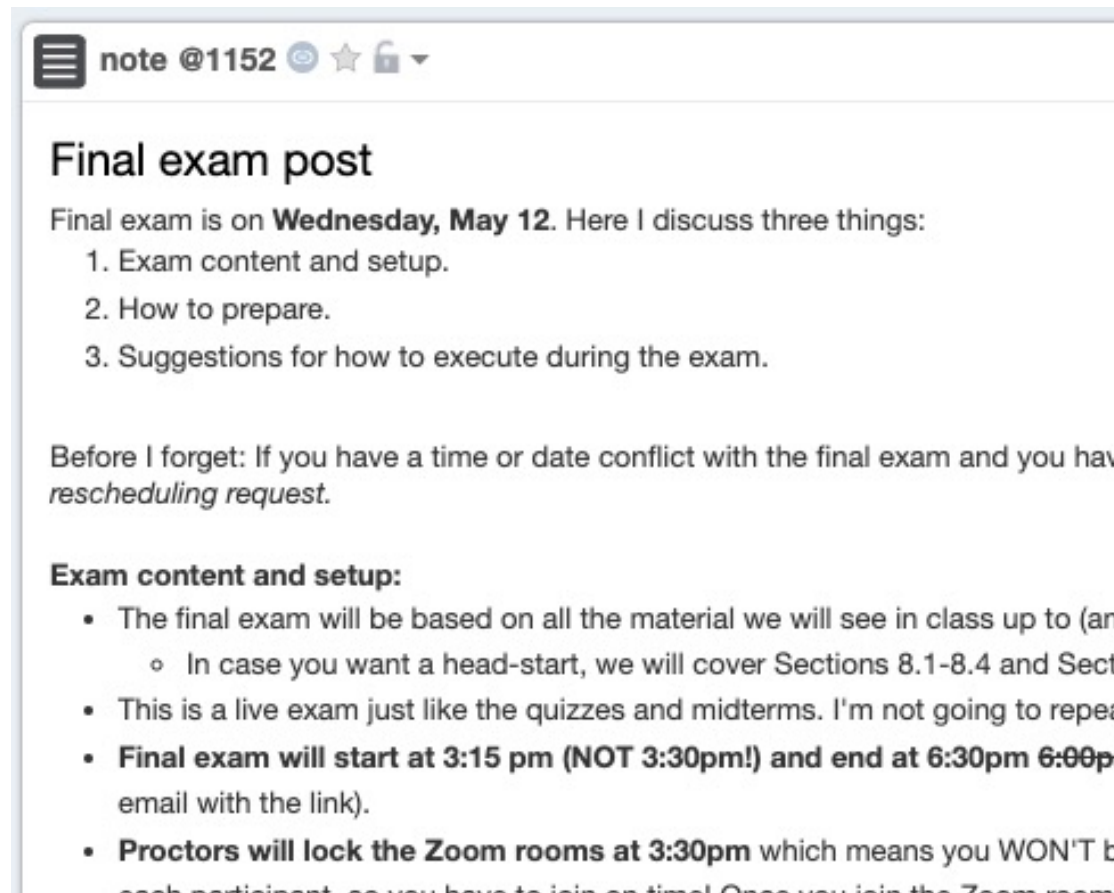
(These are also available under the "Sample Exams" dropdown)

Two comments:

- I would recommend that you not peek at the solution before
- As with the sample mid-terms, do **not** try and deduce anything
 - However, the sample exam was an actual final exam

final

The final exam post



note @1152

Final exam post

Final exam is on **Wednesday, May 12**. Here I discuss three things:

1. Exam content and setup.
2. How to prepare.
3. Suggestions for how to execute during the exam.

Before I forget: If you have a time or date conflict with the final exam and you have a *rescheduling request*.

Exam content and setup:

- The final exam will be based on all the material we will see in class up to (and including) Section 8.4.
 - In case you want a head-start, we will cover Sections 8.1-8.4 and Section 8.5.
- This is a live exam just like the quizzes and midterms. I'm not going to repeat the exam.
- **Final exam will start at 3:15 pm (NOT 3:30pm!) and end at 6:30pm 6:00pm** (I will email you with the link).
- **Proctors will lock the Zoom rooms at 3:30pm** which means you **WON'T** be able to join the room if you are not in on time! Once you join the Zoom room, you will be able to see the exam questions.

Exam is 3 (three) hours

Course evaluations incentive

note @1053

Incentive for filling course evals

I will release some questions on the final exam **depending on the level of response on the official course evals.**

- If **$\geq 85\%$** students submit the course evals, I will release **Q1.a (worth ~~2~~ 3 pts)**
- If **$\geq 90\%$** students submit the course evals, I will release **Q1.a and Q1.b (worth ~~4~~ 6 pts)**

Some other relevant comments:

- The deadline is May 9th.
- I will post the up-to-date response rate in the comments section below every 3 days until May 9th.
- The % is based on current student registered (248): i.e. it does not include students who have resigned
- This must be the link to the course evals: <https://sunyub.smartevals.com/>
 - But double check the email you might have received on this.

logistics final

It's 62% now: 154/248. 85% is 211 => 57 more needed

$$Y \in P X$$

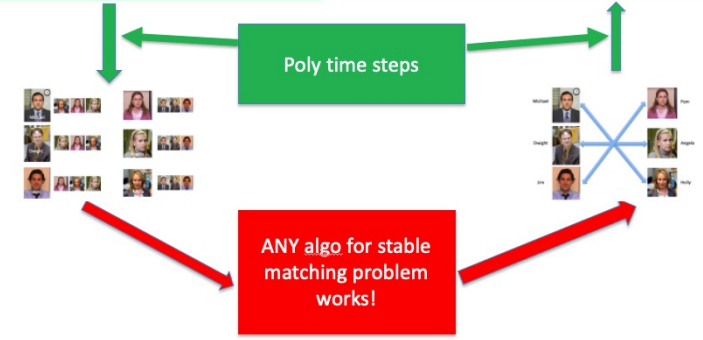
Question 2 (Crimson Hawks are in town)

$\in P$



Attends	Slot 1	Slot 2	Slot 3	Slot 4
A ₁	C ₁	Free	C ₂	Free
A ₂	Free	C ₁	Free	C ₂

Attends	Slot 1	Slot 2	Slot 3	Slot 4
A ₁	C ₁	Free	C ₂ (brunette head)	
A ₂	Free	C ₁ (brunette head)		



Arbitrary Y instance

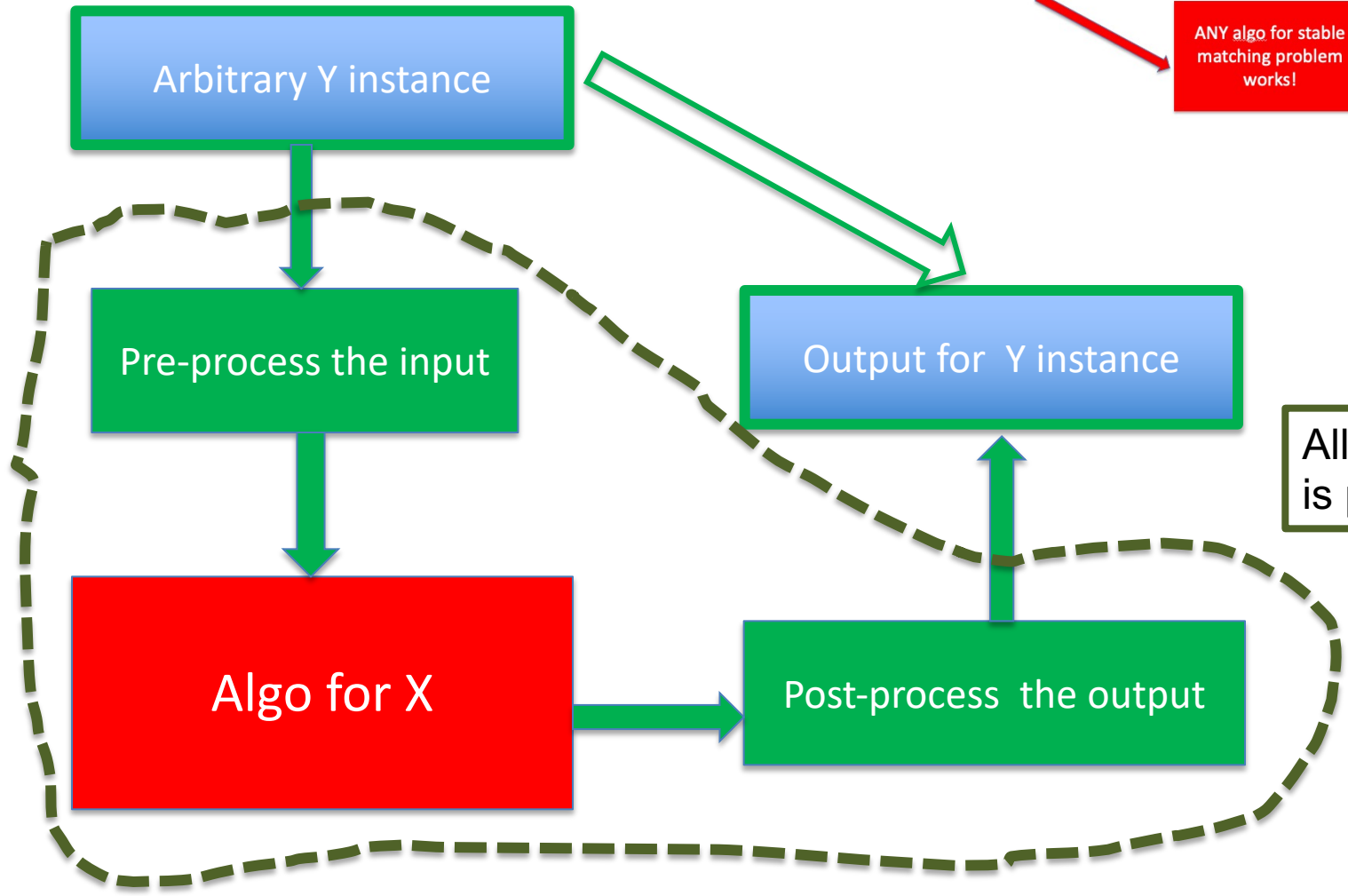
Pre-process the input

Algo for X

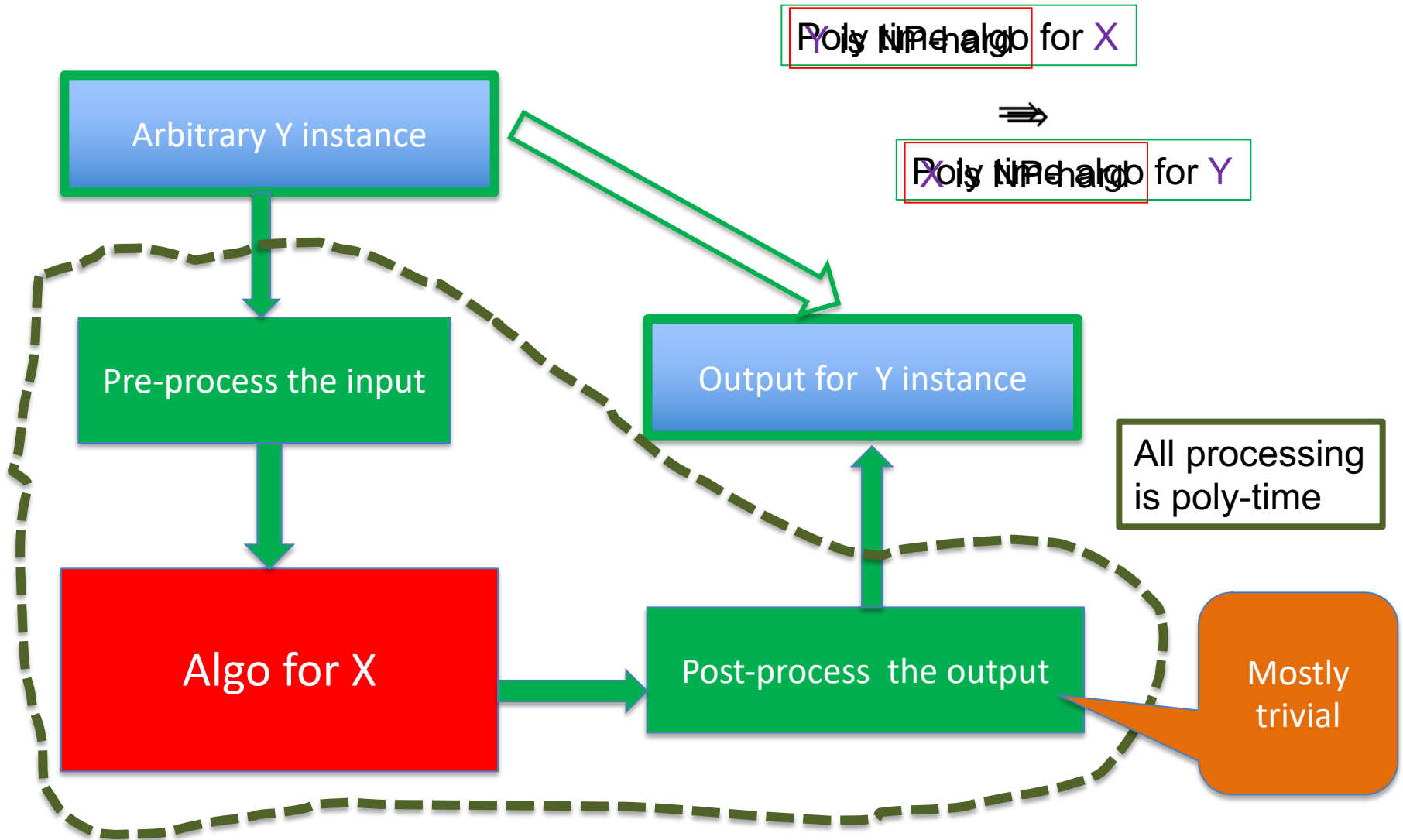
Output for Y instance

Post-process the output

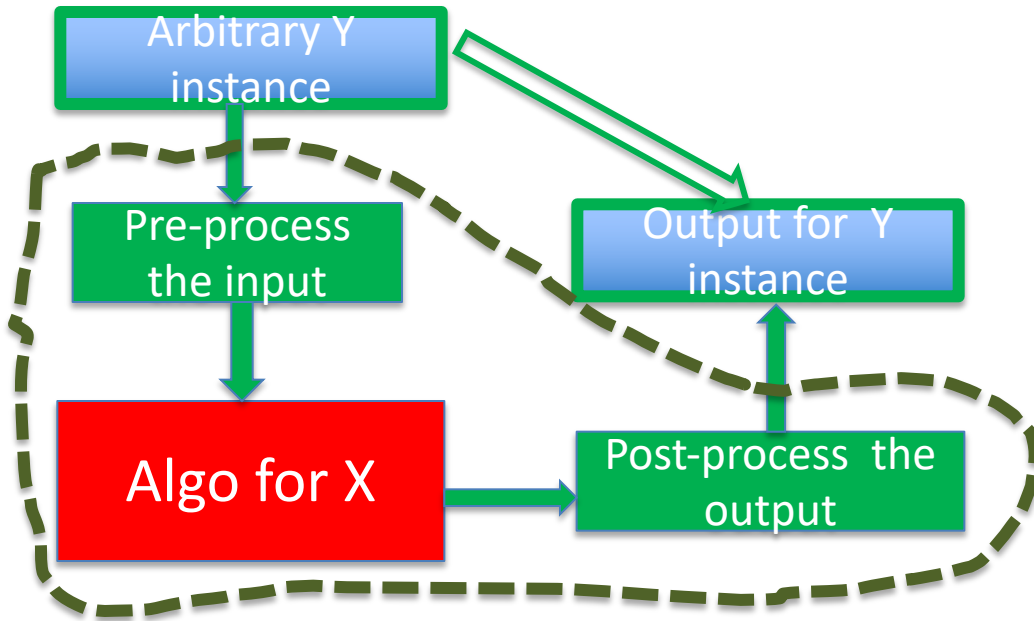
All processing is poly-time



Implications of $Y \leq_p X$



Independent Set \leq_p Vertex Cover



AlgoIS (G, k)

$G' = G$

$k' = n - k$

$b = \text{AlgoVC}(G', k')$

return b



Today's agenda

Recap of NP-completeness

NP-completeness of k -colorability

