

Lecture 36

CSE 331

Apr 29, 2020

Quiz 2 on Monday (May 3)

note @1066

Quiz 2: May 3rd, Monday

Quiz 2 is on **Monday, May 3**. There will be two T/F questions with justification (like those in the sample midterm 1: @485) Also, quiz 2 will cover all topics covered in class till (and including) Friday, April 30.

Please read below carefully. Although most things are the same as midterms, read it as if you haven't seen any of this before. **You must follow the instructions religiously.** Otherwise you'll risk losing some points.

I also give some extra information below in *italic fonts* to inform you about the common mistakes you did in the midterms and quiz 1.

First, the rules about start/ finish times, cheat-sheet, and what you need to do before the exam:

- **The quiz 2 will start at 2:50 pm (NOT 3:00pm!) and end at 3:15pm.** This means **you must be online at your Zoom link at 2:50pm.** Zoom links will be emailed to you this week. **If you resigned, you won't have a link.**
- **Proctors will lock the Zoom rooms at 2:55pm** which means you **WON'T** be able to join the exam after 2:55.
 - *This is important for us because many proctors (including myself!) have trouble with the late joiners; we have to check certain things with each participant, so you have to join on time!*
- Once you join the Zoom room, the proctor will verify certain things for each participant.
 - You must show your UB id to the proctor. If you don't have it (!), you must show your driver's license or passport (your photo must be there!)
 - You must ensure that BOTH cameras are located correctly, see below for this.
- **Quiz 2 will be posted on Piazza at 2:58pm.** It'll be a link to a pdf in UB Box.
 - After you click the link, you **MUST** close the Piazza tab in your browser.
- **The exam duration is 17 minutes: starting at 2:58, ending at 3:15. THIS INCLUDES THE UPLOADING TIME!**

PRACTICE THE UPLOADING PROCESS!!!

Final exam conflicts

- If you received an email from me, REPLY!!!!!!
- If not, reach me today!!!

$$Y \in P X$$

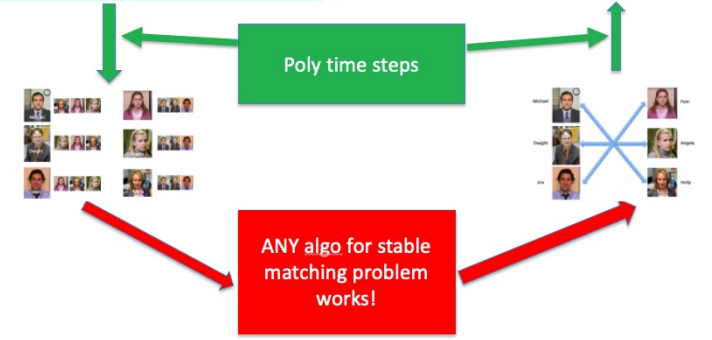
Question 2 (Crimson Hawks are in town)

$\in P$



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 hair)	
A ₂	Free	C ₁ (brunette hair)		



Arbitrary Y instance

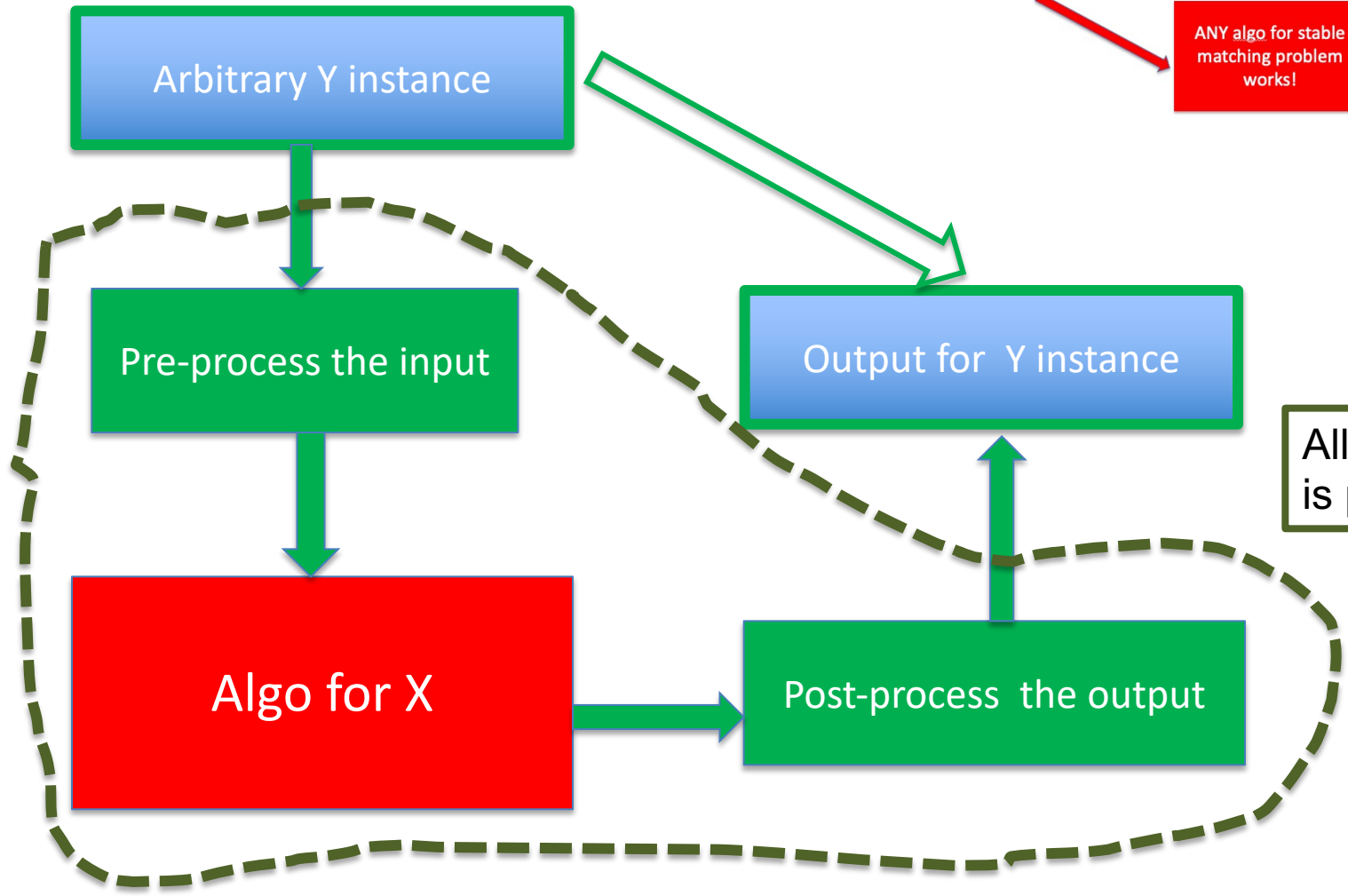
Pre-process the input

Algo for X

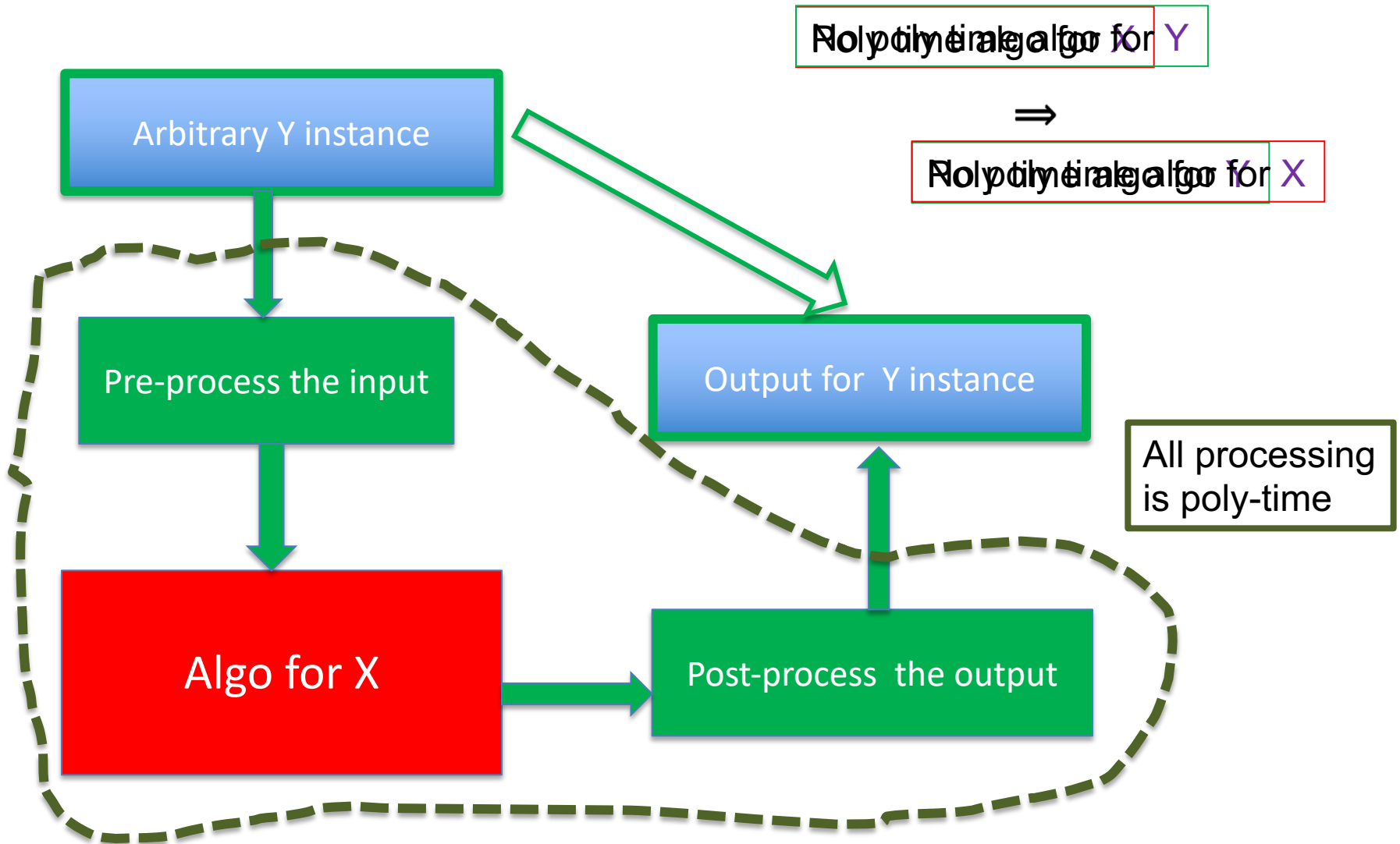
Output for Y instance

Post-process the output

All processing is poly-time

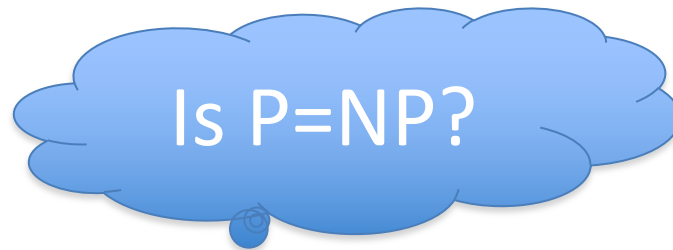


Implications of $Y \leq_p X$



P vs NP question

P: problems that can be solved by poly time algorithms



NP: problems that have polynomial time verifiable witness to optimal solution