

Today: Big picture, synthesis, review. May the 4th fourth force be with you!

Next class: Exception in thread "main" java.lang.NullPointerException

Reminders:

1. Upload posters: `cos350-po2-lastname-firstname-PQRS.zip`.
2. At final exam, submit:
 - (a) one-page learning observations based on journal, exercises, homeworks, etc.
 - (b) any 10 class exercises.
3. Use the class newsgroup: announcements, questions, hints, ...

1. Write your name below.

2. (a) Reduce the following instance of 3-CNF-SAT to an instance of CLIQUE by using the reduction described in the textbook (pp. 1087–1089).
 - (b) Solve the CLIQUE instance using any method, but explain your answer.
 - (c) Use the above solution to solve the 3-CNF-SAT instance, explaining your answer.

$$(x_1 \vee x_2 \vee \neg x_3) \wedge (\neg x_1 \vee \neg x_3 \vee x_4) \wedge (\neg x_1 \vee x_2 \vee \neg x_3) \wedge (x_1 \vee x_2 \vee \neg x_4)$$

3. We wish to find the smallest set of names, from the list below, that covers all letters of the alphabet (a through z, ignoring case). Trace the execution of the textbook's GREEDY-SET-COVER algorithm (p. 1119) on the *set cover* instance corresponding to this problem. [Do a few steps in class, and the rest on your own later.]

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