

## Homework #4

(115 points)

*Due Date: **Monday**, November 10<sup>th</sup>, 2008, at 3:30 p.m.*

Remember: All homeworks in this class must be electronically submitted (via ‘turnin’ on lectura)!

Write complete, legible answers to each of the following questions. A problem identified as “M.N” is exercise N from chapter M of the Elmasri/Navathe text, 5th edition. Show your work, when appropriate, for possible partial credit. This is not a group project; do your own work. We will make available our solutions 24 hours after the due date (remember, you can use one late day on homeworks, so we can’t give solutions on the due date).

On the due date and time, run ‘turnin’ on lectura to submit your electronically-formatted version of your solutions (the submission folder is `cs460h4`). You are also expected to turn in a paper copy of your solutions. You may wait to submit your paper copy until the start of class on the 13th, but we will certainly accept them before that time. Solutions submitted more than 24 hours after the due date and time will not be accepted.

### Chapter 6: Relational Algebra

1. ( 5 points) 6.13
2. (10 points) 6.18 (a,c,d) [Take “relational expressions” to mean relational algebra.]
3. (10 points) 6.26 (to refresh your memory!)

### Chapter 8: SQL

4. ( 5 points) 8.10
5. (10 points) 8.11 (a,c,d)
6. ( 5 points) 8.14
7. (10 points) 8.17
8. ( 5 points) 8.24 (b,d)
9. ( 5 points) 8.25 (b,d)

### Chapter 10: Functional Dependencies and Normalization

10. ( 5 points) 10.6
11. (10 points) 10.18 (a,c,e)
12. ( 5 points) 10.20
13. (10 points) 10.24
14. (10 points) 10.32
15. (10 points) 10.36