CS 386/586 Fall 2012

Exercises based on Weeks 2 and 3 of the class

You must do these exercises and be capable of demonstrating these abilities in a face-to-face meeting with the TA/grader/professor. (Note this does not include the ones called challenge problems.) The face-to-face meetings will be scheduled several times during the term. Details will be available in a few days.

Exercises in your textbook:

5.1.3 a. – b.

5.1.4 a. – e. (g. – i. are challenge exercises that you can work on collaboratively)
For 5.1.4, you only need to discuss why these laws hold for bags. Thus, you only need to discuss what happens when tuples appear multiple times in the various input tables.

5.2.1

5.2.2

5.2.3 is a challenge exercise that you can work on collaboratively

6.1.2 Write your queries in SQL, run them against your database (that you created during Week 1), and write equivalent relational algebra queries. (Use the extended relational algebra – not the original one that was presented in Chapter 2.)

6.1.3 a. – f. Write your queries in SQL, run them against your database, and write equivalent relational algebra queries (in the extended relational algebra).

6.1.4 a. – f. Write your queries in SQL, run them, and write equivalent relational algebra queries.

6.1.5

6.2.2 a. – d. Write your queries in SQL, run them, and write equivalent queries in relational algebra.

6.2.3 b., d., e. Write your queries in SQL, run them, and write equivalent queries in relational algebra.

6.2.4

6.3.1 a. – c. Write your queries in SQL, run them, and write equivalent queries in relational algebra.

6.3.2 a. – c. Write your queries in SQL, run them, and write equivalent queries in relational algebra.

6.3.5

6.3.7

6.3.9

6.3.11

6.4.1 (write and run the queries listed in Exercise 2.4.1 a. – g. in SQL)

6.4.2 (write and run the queries listed in Exercise 2.4.2 a. – g. in SQL)

6.4.5

6.4.6 (j. is a challenge problem that you work on collaboratively)

6.4.7 a. – d. plus f.

6.4.9