

You are advised to submit typewritten (11 point font, 1 inch margins) responses unless you have very clear handwriting. Your responses must be well-written and precise. You will lose points for convoluted writing. Interpret the questions to the best of your ability; if you need to make additional assumptions, note them clearly.

You must submit your work by 11:00am on Friday, 25th May, 2001. Submit your work to Brenda or someone else in the department office.<sup>1</sup> In the following, AHV, HK, and ABS refer to [AHV95], [HK01], and [ABS99], respectively.

1. (60 pts) Write a critique of any three class projects *other than your own*. Each critique should be *at most* three pages long and should include a paragraph summarizing the problem and solution, a paragraph on the advantages, and a paragraph on the disadvantages. Identify the course topic (discussed in class or covered in AHV, HK, ABS, or the papers in the reading list) that is closest to the one addressed by each project and explain the connections. (You may ask other students to remind you of some details of their projects; however, the discussion should be limited to answering factual questions. That is, the pros and cons should be based on your own reasoning.)
2. (10 pts) Solve Exercise 13.2 from AHV.
3. (10 + 20 pts) Solve Exercises 14.2 and 14.4 from AHV.
4. (20 pts) Solve Exercise 15.6 from AHV.
5. (20 pts) Solve Exercise 16.12 from AHV.
6. ( $2 \times 10$  pts) Solve Exercises 17.25 and 17.26 from AHV.
7. (10 + 10 + 20 pts) Solve Exercises 18.1, 18.8, and 18.9 from AHV.

## References

- [ABS99] Serge Abiteboul, Peter Buneman, and Dan Suciu. *Data on the Web: From Relations to Semistructured Data and XML*. Morgan Kaufmann, first edition, October 1999.
- [AHV95] Serge Abiteboul, Richard Hull, and Victor Vianu. *Foundations of Databases*. Addison-Wesley, 1995.
- [HK01] Jiawei Han and Micheline Kamber. *Data Mining: concepts and techniques*. Morgan Kaufmann, San Francisco, California, 2001.

---

<sup>1</sup>If you submit electronically, make sure you submit a PDF file that can be viewed and printed using the gv program on the junkfood machines. Do *not* email your files; instead, upload them (using anonymous FTP) to `ftp.cs.umd.edu`, directory `/incoming/chaw` and send me email with the details.