

Introduction to Databases

Homework 3

Handed out: Monday, October 31, 2005

Due back: Wednesday, November 16, 2005 (at the start of class)

Notes: To be done individually

1. Textbook exercise 5.2.1b-e,g,i,k
Your final answer should be formal functional notation. You might find it helpful to work out expression trees first, however.
2. Textbook exercise 5.2.8
3. Textbook exercise 5.2.9
4. Textbook exercise 5.3.3
5. Textbook exercise 5.3.4c,f,g
6. Textbook exercise 5.4.1h,j,l
7. Textbook exercise 5.4.2d,e
8. Textbook exercise 5.5.1b,c
9. Textbook exercise 5.5.4

Extra Credit: Define an XML DTD for microblog messages. The DTD must capture the notion of nesting of messages.

Extra Credit: Write XPATH queries to select all messages that reply to a given message, and to select messages written by a particular user.

Extra Credit: Write an XSLT transform to convert microblog messages into XHTML.