Database Systems, fall 2006

Rasmus Pagh

Exercises for lecture on September 12

1. (Introductory. RG Exercise 3.14) Consider the ER diagram obtained when solving Exercise 2.4 in RG.
   (a) Convert this ER diagram to a relational database schema using the methodology described in the lecture (and RG chapter 3).
   (b) Create (some of the) relations in Oracle. Specify as many constraints as you can, and note the constraints that you cannot express.
   (c) Enter a few tuples in some of the created relations.
2. (Intermediate. RG Exercise 3.15.) Consider the ER diagram obtained when solving Exercise 2.5 in RG. (The ER diagram can also be found in the book's solution manual.)
   (a) Convert this ER diagram to a relational database schema using the methodology described in the lecture (and RG chapter 3).
   (b) Create the analogous data model in Rational Data Architect. (This steps assumes that you use a machine at ITU.) Look at the DDL generated by Rational Data Architect, and use it to create the relations in Oracle.
3. (Intermediate. RG Exercise 3.17.) Same as above, for Exercise 2.7 in RG.