

Exercises for DW & DM

Sheet 5 (until 07.04.2008)

Please note that you need **50%** of all exercise points to be admitted for the final exams. Exercises have to be turned in until **Thursday** before the next lecture and should be completed in teams of two students each. Write both names and “Matrikelnummer” on each page. If you have multiple pages, staple them together! Please hand in your solutions on **paper** into the mailbox at the IFIS floor or to our secretary (Mühlenpfordtstraße 23, 2nd floor). You may answer in either German or English.

Exercise 1 (12P)

1. Fill in with records the tables described in the schema from Annex 1 (draw the tables with the data your data in them). (2P)
2. Write an SQL select query, which applies the Cube operator on all 3 dimensions, Cube(Week, Store, Group) of the database in Annexe1 with the records you have filled at Exercise 1, and then present the result of the query as a table. (4P)
3. Write an SQL query which retrieves the top 3 selling product groups in February, in Braunschweig. (3P)
4. Write an MDX query performing the same task as exercise 1.3 (the previous exercise). (3P)

Exercise 2 (5P)

1. What kind of a schema is presented in Annex 1? (1P)
2. In which case should we consider migrating from a snowflake schema to a star schema? (1P)
3. Considering that the product dimension is subject to often change, how would you transform (draw) the schema in Annex 1, into a Starflake one? (3P)

Annex 1:

