

Introduction to Databases, ITU, Fall 2003

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Exercises on September 23

You are unlikely to be able to do all the exercises in two hours. Therefore you are encouraged to prepare at home, and use the exercises for those parts you find difficult.

1. GUW 3.4.1 (if in doubt about what tuples are allowed, make reasonable assumptions). If possible, construct a relation instance exhibiting redundancy, update anomalies, and deletion anomalies. Decompose the relation into BCNF.
2. GUW 3.4.2. Decompose the relation into BCNF.
3. GUW 3.6.1 part i), ii) for relation schemas and FDs in a) and b). (Use the inference rules in the box on page 99 to find all FDs.)
4. GUW 3.6.1 part iii), iv) for relation schemas and FDs in a) and b).

To be handed in no later than October 3, 11.59 AM:

As always, your hand-in must be completed individually.

GUW 3.6.1 part i), ii) for relation schemas and FDs in e) and f).

For part i) use the inference rules in the box on page 99. Remember to explain how you arrived at your result.