Database Concepts

Exercise 1

1. Explain the terms Database (DB), Database System (DBS) and Database Management System (DBMS)!

2. What is meant with data integration and redundancy?

3. Explain the term transaction! Give examples.

4. Explain the terms synchronisation and persistence!

5. What data is stored within the data dictionary?

6. For which of the following scenarios, the use of a DBMS is reasonable:
   - The student Bruce Springsteen wants to manage his CD collection.
   - For reporting reasons, the supermarket Walmort wants to store all buying transactions of their customers.
   - The student portal webunihelp.com shall be extended with a message board.
   - The examination office wants to manage grades electronically.

Explain your decision and discuss advantages and disadvantages of database systems in general and with respect to the specific use case.