1. Give a definition for the following terms and differentiate between them: *data warehouse*, *distributed databases*, and *federated databases*. How are data marts related to them?

2. Explain conceptual differences between transactional databases (*OLTP*) and data-warehouse technologies (*OLAP*). To this end, explain the term *transaction*.

3. What are *dimensions*, *facts*, and *aggregated facts* in the context of data warehouses. Give an explaining example.

4. Collect information about benchmarking for databases. What are typical benchmarks? For this, consider especially the TPC benchmarks\(^1\)

\(^1\)More information here: [http://tpc.org/](http://tpc.org/)