Assignment 1: Describe the data cube, how is it defined and which operations does it support?

Assignment 2: Describe different forms of hierarchies w.r.t. dimensions in a DWH. Build a parallel hierarchy with the following elements:

- Stocks
- Product 1
- ...
- Product n
- Products
- insurances
- Own products
- property insurances
- stock exchange
- health insurances
- trusts
- third-party products

Assignment 3: Assign the following facts to the corresponding summation type, and explain the summation type.

- order quantity of an article per day
- stock
- exchange rate

Which further characteristics of facts have to be fulfilled?

Assignment 4: Classify and define the following aggregate functions:

- Min
- Sum
- STDDEV
- Percentile
- Count
- Rank
- Max
- Average
Assignment 5: Transform the following ER-Diagram into the ME/R-Model and into Adapt.

Assignment 6: Define the terms star-schema and snowflake-schema.

Assignment 7: How can classification hierarchies of the star schema be represented using relations?