Assignment 1: How can cubes in general be calculated efficiently? What is an Iceberg-Cube?

Assignment 2: Describe briefly the OLAP functions defined in SQL:2003 from the lecture.

Assignment 3: Formulate the following SQL queries with the created data warehouse:

1. Compute the variance of the monthly sales figures (L_QUANTITY) between 1994 and 1996 for each product type (P_TYPE).

2. Compute the sales figures of products of the product type "SMALL POLISHED COPPER" based on the year and the origin of customers. Formulate the query once using the CUBE-operator and another time using the ROLLUP-operator.

3. Determine the 2 products that generated the highest revenue (L_EXTENDEDPRICE) for each Nation.

4. Compute the fraction of each state on the overall sales in 1996.

Good Luck!