

CSE 111 – DATABASE SYSTEMS

Lab 4

In this Lab session you will write 15 SQL queries for the TPCCH database. You will execute the queries for the data loaded in Lab 2 and check the results.

Write SQL statements for the following queries on the TPCCH database (1 pt. per query):

1. Print the total amount of money (o_totalprice) spent on orders by each customer from **FRANCE**.
2. Return the number of suppliers in each country.
3. How many orders are posted by customers in each country in **EUROPE**?
4. How many parts with size below 20 does each supplier from **BRAZIL** sell?
5. Find the number of orders posted by each customer from **GERMANY** in 1995.
6. How many parts produced by each manufacturer (p_mfgr) are ordered at each order priority?
7. How many orders do customers in each country in **ASIA** have in each order status?
8. Print the number of orders completed in 1995 by the suppliers in each country in **AMERICA** (see orders.orderstatus; F stands for complete).
9. How many different clerks did the suppliers in **RUSSIA** work with?
10. Find the maximum discount for each type of items having **ECONOMY** in their type name.
11. Find the supplier(s) with the largest account balance in every region.
12. What is the maximum account balance for the suppliers in each region?
13. How many distinct orders are between suppliers in **EUROPE** and customers in **CANADA**?
14. List the total value (l_extendedprice) of all the lineitems sold between any two regions. Print the supplying region, the customer region, and the total value.
15. How many orders involve a customer with negative balance and a supplier with positive balance?

Instructions. You are required to execute the queries on the TPCCH database you populated in Lab 2. We provide you the correct answers for this database. We will check the correctness of your queries on a different database. Folder **Lab4** under **Lab** contains an archive **lab4-results.zip** with the correct answers. There is a file for each query, e.g., **1.out** for query 1, **2.out** for query 2, etc. You are required to turn in an archive containing a file with the SQL statement for every query. The names of the files have to be **1.sql** for query 1, **2.sql** for query 2, and so on. There should be exactly 15 files in the archive file. The name of the archive file has to be **firstname-lastname-lab4.zip** where **firstname** and **lastname** are your first and last names, respectively. The type of the archive file has to be **zip**.