

## CSE 111 – DATABASE SYSTEMS

### Lab 4

In this lab session you have to write 15 SQL queries for the TPCB database created and populated in the previous labs. The queries are the following (1 point per query):

1. How many orders are posted by customers in every country in **EUROPE**?
2. Find the number of orders posted by every customer from **EGYPT** in 1992.
3. Find the total price paid on orders by every customer from **ARGENTINA** in 1996. Print the customer name and the total price.
4. How many parts in a **%BOX%** container does every supplier from **KENYA** offer? Print the name of the supplier and the number of parts.
5. Find the number of suppliers from each of **ARGENTINA** and **BRAZIL**.
6. How many unique parts produced by every supplier in **INDONESIA** are ordered at every priority? Print the supplier name, the order priority, and the number of parts.
7. How many orders do customers in every nation in **AFRICA** have in every status? Print the nation name, the order status, and the count.
8. How many different order clerks did the suppliers in **PERU** work with?
9. Find the number of distinct orders completed in 1993 by the suppliers in every nation in **AFRICA**. An order status of **F** stands for complete. Print only those nations for which the number of orders is larger than 200.
10. Find the minimum and maximum discount for every part having **ECONOMY** or **COPPER** in its type.
11. How many distinct orders are between customers with negative account balance and suppliers with positive account balance?
12. What is the maximum account balance for the suppliers in every region? Print only those regions for which the maximum balance is larger than 9000.
13. List the minimum total price of an order between any two regions, i.e., the suppliers are from one region and the customers are from the other region.
14. How many line items are supplied by suppliers in **ASIA** for orders made by customers in **KENYA**?
15. Find the supplier with the largest account balance in every region. Print the region name, the supplier name, and the account balance.

In order to complete the lab you have to perform the following tasks:

1. Write the **SQL** statement corresponding to every query in the file **test/x.sql**, where **x** is the number of the query above. Every query goes into its separate file. These are the only files you have to modify and submit in this assignment.
2. The format of the expected output for every query is available in **output/x.out**. The included results are only samples. They are not the correct results. So, make sure you match the format, not the exact results.
3. The submission consists of a compressed **zip** file that contains the files in the **test** folder. The name of the file has to be **lab-4.zip**. When you create the file, include the folder **test** into the compression, not every file **test/x.sql** separately.