

CS542: Homework 3

Using SQLite, **develop and execute a single SQL for each of the following queries** using the “tpch.db” database:

Problem 1 (SQL) [5 Points]

Report how many nations (i.e., the number of nations) in the nation table.

Problem 2 (SQL) [5 Points]

Report how many suppliers (i.e., the number of suppliers) in the supplier table.

Problem 3 (SQL) [5 Points]

Report how many suppliers (i.e., the number of suppliers) have positive account balance (i.e., with account balance greater than 0).

Problem 4 (SQL) [5 Points]

Report how many customers (i.e., the number of customers) are in the nation of ‘Egypt’.

Problem 5 (SQL) [5 Points]

Report how many different brands are there in the part table.

Problem 6 (SQL) [5 Points]

For all nations, report the name of the nation along with the name of the region to which a nation belong. Order the result in an ascending order of the nation name.

Problem 7 (SQL) [5 Points]

For each nation, report the nation name and the number of suppliers per each nation.

Problem 8 (SQL) [5 Points]

Report the total (i.e., the sum) available quantity of all parts supplied by the supplier with the name of ‘Supplier#000000006’.

Problem 9 (SQL) [5 Points]

For orders with ‘1-URGENT’ order priority, report how many items (i.e., the number of items) were received (i.e., l_receiptdate) after their commit date (i.e., l_commitdate).

Problem 10 (SQL) [5 Points]

For each region, report the region name and the number of customers (per region) with a positive account balance (i.e., with account balance greater than 0).

Deliverables:

Each student should deliver a report containing the required solution. Your final **submission must be uploaded to Canvas in pdf format.** Your report **must** contain a screenshot of the actual **SQL** and the **output** of executing the query. For instance, the answer of Problem 1 above in your report would look like the following:

Problem 1 (SQL) [5 Points]

Report that number of nations in the nation table.

```
sqlite> select count(*) from nation;
count(*)
-----
25
```