

CS 338 – Winter 2014

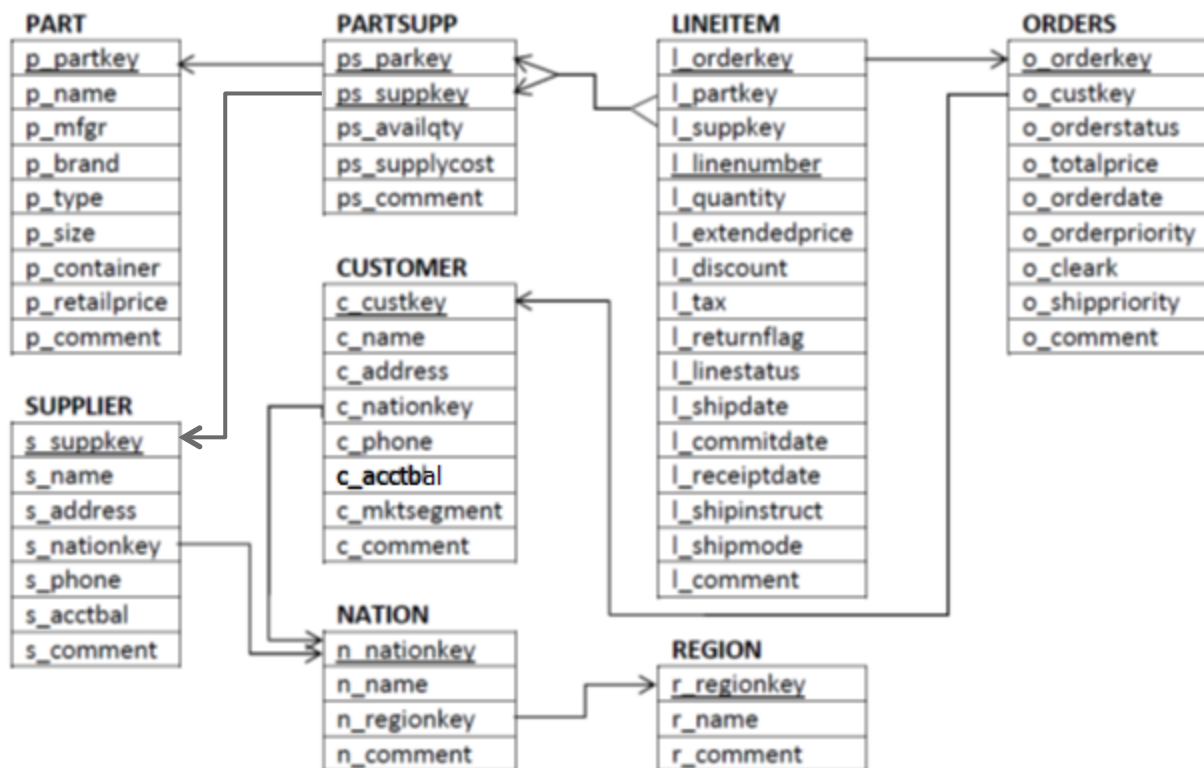
Assignment #2

Solutions will be posted on Feb 19th

Instructions

In this assignment, you will continue to write queries for two databases, TPC-H and CHINOOK, but focusing on more advanced features. Both databases are hosted on <https://www.student.cs.uwaterloo.ca/~cs338/webdb/index.php>. You can test your answers there. The application there hosts MySQL and provides a simpler interface to make things easier. Most of your code should work fine. Whenever there is something specific for MySQL, it will be explained within the question. If your query returns too many results, the server might show a message that the query is correct, but there are too many results to show. Please note that in this server message, “correct” means simply “syntactically correct”, not necessarily that your answer to the question is correct.

Part I: The TPC-H database

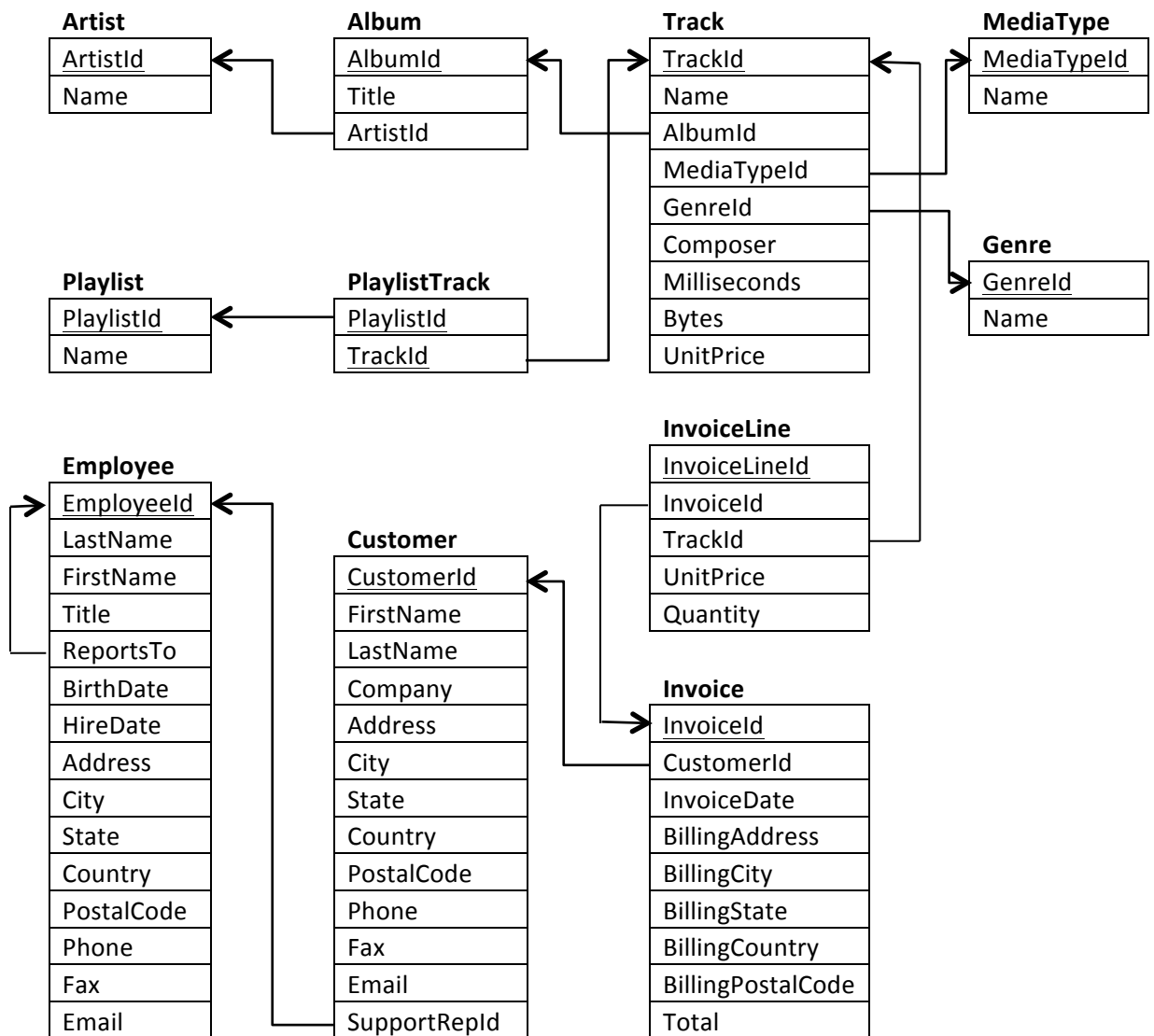


Write SQL queries to answer the following:

1. How many European customers have a balance that is less than \$8000.
2. Which region (Aisa, Europe...) supplies the most distinct parts.
3. What is the average time for shipping items by TRUCK. List the quantity and orderkey of all the items shipped by TRUCK which takes less than the above time.

4. List all the items which have NO discount and not sold to customers in EUROPE.
5. List name(s) of the customer(s) who has not place any orders.
6. List the (distinct) items which are ordered by the customers from the country where suppliers have the highest average balance.
7. Find the average price of all the orders which contain no parts with size larger than 40.
8. List the names of suppliers who supplies more than 5 parts along with the number of parts they supplies.
9. Find the names of all the distinct parts which receive the highest discount.

PART II: The CHINOOK database:



Write SQL queries to answer the following:

1. List the genre of tracks which are contained in the most playlist.
2. Find audio tracks which have a length longer than the average length of all the audio tracks.
3. Which playlist(s) contain the largest number of pop tracks.
4. Find the number of employees who live in the same city as each customer, sorted by descending order.
5. Which artist(s) has the most tracks that can be classified as Jazz.
6. Find the name of the German customer(s) who has paid the most in total and has no company name.
7. List the name and age of the employees who support more than 5 customers.
8. Find the manger who manages most employees but also being managed by someone else (Note: there are employees who do not have managers).
9. List the name of the artists with more than 5 tracks.
10. Find the playlist(s) which contains most tracks by artist "AC/DC".