Assignment 2

Due: Monday, November 25th, at 04:00pm
The deadline is definitive and it already accounts for vacation days.

Instructions

- The assignment must be done individually.
- Implement each query in its own plain text file, the file name must be `query_<number>.sql` . Example: `query_8.sql` .
- Each query will be evaluated by an automatic script that will compare its results with the ones from the reference implementation. Each query will then be either correct (+1 point) or wrong (+0 points). Misspelled file names or wrong file encodings count as wrong implementations (+0 points).
- The attributes in the results must be ordered as they appear in the text. Example: "return the beer name and its manufacturer" should be matched with a "`SELECT name, manf FROM ...`" Failure to properly order the columns leads to (+0 points).
- When asked to return information about a relation, select the attributes that identifies it, i.e. the primary key. Example: Select all the Beers that, "`SELECT name FROM Beers`".
- Non integer numbers must be rounded at the second decimal. Example 0.1234 → 0.12.
- Do not create additional tables or persistent views.
- Do not modify in anyway the existing schema/data.
- The queries will be tested against a PostgreSQL database instance, you can either install your own or use one of these provided. See post: https://classroom.google.com/u/1/c/MzcyNzQzMTc4MzRa/p/NDM2MjM1MTczMzha/details
- Table names are capitalized like shown below. **Remember " in your queries.**

Delivery

- Create a .zip archive with, and only with, the 10 `.sql` files and upload it via Google Classroom.
- The name of the archive must be `SQL_<mat>.zip`, where mat is yout matricole. Example: `SQL_12345.zip` ; example command: `zip SQL_12345.zip *.sql`.
- The archive must not contain anything else (no subfolders, no files). Extraction and evaluation is completely automated. Malformed archives, misspelled names, and double submissions will result in a total evaluation of 0 points.

Schema

```
Beers(name, manf)
Bars(name, addr, license)
Drinkers (name, addr, phone)
Likes(drinker, beer)
    FK (drinker) REFERENCES Drinkers
    FK (beer) REFERENCES Beers
Sells(bar, beer, price)
    FK (bar) REFERENCES Bars
    FK (beer) REFERENCES Beers
Frequents(drinker, bar)
    FK (drinker) REFERENCES Drinkers
    FK (bar) REFERENCES Bars
```

Queries

1. What beers are made by `Anheuser-Busch`?
2. Find the bars that serve `Miller` and `Bud` at the same price.
3. Find the name and manufacturer of each beer that `Fred` likes.
4. Find those beers that are the unique beer by their manufacturer.
5. Find the beer(s) sold for the highest price.
6. Find the drinkers and beers such that:
   the drinker likes the beer, and
   the drinker frequents at least one bar that sells that beer.
7. Find all the different prices charged for beers (no duplicates).
8. List the bars that serve a beer that `Joe` likes.
9. List the drinkers that frequent at least one bar that serves a beer they like.
10. List the drinkers that frequent only bars that serve some beer that they like.
    (Assume each drinker likes at least one beer and frequents at least one bar.)