

SQL Exercise

July 2020



Outline

[REDACTED] As part of our assessment for the Product Data Analytics role, we would like you to complete the following SQL exercise. Please do not spend more than 2 hours on this. Once you have completed the exercise, please return to Ashleigh - [REDACTED]

Attached to this email is a zip file containing data for the exercise. The name of this database is ex_social.

We would like you to **Answer** the following questions in relation to this data:

1. How many users are there in each house?
2. List all following links that were created before September 1st, 1993
3. List all the following links established before September 1st 1993, but this time use the users first names
4. Give a count of how many people followed each user as of 1999-12-31. Give the result in terms of "users full name, number of followers"
5. List the number of users each user follows
6. List all rows from follows where someone from one house follows someone from a different house. Please give the result with user names.
7. List all unrequited followings (i.e. where A follows B but B does not follow A)

Note that how you interpret what the columns should be (first name, user id, full name) is left up to you interpretation. For example, the question doesn't explicitly ask for the houses of each person. Other answer formats would also be acceptable, as long as they represent the same relationships.

We define a *friendship* as a relationship between two users where both follow each other. The friendship is established when the *later* of the two links is established.

Your **ANSWERS** should be submitted in presentation format **AND** should explain how you arrived at your answers in terms of your logic and the SQL queries you used.

