

This questions were asked in a Google interview

Given the 2 tables below, User and UserHistory:

User

user_id
name
phone_num

UserHistory

user_id
date
action

1. Write a SQL query that returns the name, phone number and most recent date for any user that has logged in over the last 30 days (you can tell a user has logged in if the action field in UserHistory is set to "logged_on").

Every time a user logs in a new row is inserted into the UserHistory table with user_id, current date and action (where action = "logged_on").

2. Write a SQL query to determine which user_ids in the User table are not contained in the UserHistory table (assume the UserHistory table has a subset of the user_ids in User table). Do not use the SQL MINUS statement. Note: the UserHistory table can have multiple entries for each user_id.

3. Given the tables above, write a SQL query to determine which user_ids in the User table are not contained in the UserHistory table (assume the UserHistory table has a subset of the user_ids in User table). Do not use the SQL MINUS statement. Note: the UserHistory table can have multiple entries for each user_id.

Note that your SQL should be compatible with MySQL 5.0, and avoid using subqueries.