Problem 1264: Page Recommendations

Problem Information

Difficulty: Medium
Acceptance Rate: 65.39%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Friendship`

+---------------+---------+ | Column Name | Type | +---------------+---------+ | user1_id | int | | user2_id | int | +---------------+---------+ (user1_id, user2_id) is the primary key (combination of columns with unique values) for this table. Each row of this table indicates that there is a friendship relation between user1_id and user2_id.

Table: `Likes`

+-------------+---------+ | Column Name | Type | +-------------+---------+ | user_id | int | | page_id | int | +-------------+---------+ (user_id, page_id) is the primary key (combination of columns with unique values) for this table. Each row of this table indicates that user_id likes page_id.

Write a solution to recommend pages to the user with `user_id = 1` using the pages that your friends liked. It should not recommend pages you already liked.

Return result table in **any order** without duplicates.

The result format is in the following example.

Example 1:

Input: Friendship table: +----------+----------+ | user1_id | user2_id | +----------+----------+ | 1 | 2 | | 1 | 3 | | 1 | 4 | | 2 | 3 | | 2 | 4 | | 2 | 5 | | 6 | 1 | +----------+----------+ Likes table: +---------+---------+ | user_id | page_id | +---------+---------+ | 1 | 88 | | 2 | 23 | | 3 | 24 | | 4 | 56 | | 5 | 11 | | 6 | 33 | | 2 | 77 | | 3 | 77 | | 6 | 88 | +---------+---------+ **Output:** +------------------+ |

recommended_page | +------------------+ | 23 | | 24 | | 56 | | 33 | | 77 | +------------------+ **Explanation:** User one is friend with users 2, 3, 4 and 6. Suggested pages are 23 from user 2, 24 from user 3, 56 from user 3 and 33 from user 6. Page 77 is suggested from both user 2 and user 3. Page 88 is not suggested because user 1 already likes it.

Code Snippets

MySQL:

```
# Write your MySQL query statement below
```

MS SQL Server:

```
/* Write your T-SQL query statement below */
```

PostgreSQL:

```
-- Write your PostgreSQL query statement below
```