1264. Page Recommendations Premium

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SQL Schema > Pandas Schema >

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.

Seen this question in a real interview before?   1/5
Yes   No

Accepted **45.3K** | Submissions **69.4K** | Acceptance Rate **65.3%**

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