

3278. Find Candidates for Data Scientist Position II Premium

Medium Topics

SQL Schema > Pandas Schema >

Table: Candidates

Column Name	Type
candidate_id	int
skill	varchar
proficiency	int

(candidate_id, skill) is the unique key for this table.
Each row includes candidate_id, skill, and proficiency level (1–5).

Table: Projects

Column Name	Type
project_id	int
skill	varchar
importance	int

(project_id, skill) is the primary key for this table.
Each row includes project_id, required skill, and its importance (1–5) for the project.

Leetcode is staffing for multiple data science projects. Write a solution to find the **best candidate** for **each project** based on the following criteria:

- Candidates must have **all** the skills required for a project.
- Calculate a **score** for each candidate-project pair as follows:
 - Start** with **100** points
 - Add** **10** points for each skill where **proficiency > importance**
 - Subtract** **5** points for each skill where **proficiency < importance**

Include only the top candidate (highest score) for each project. If there's a **tie**, choose the candidate with the **lower** `candidate_id`. If there is **no suitable candidate** for a project, **do not return** that project.

Return a result table ordered by `project_id` in ascending order.

The result format is in the following example.

Example:

Input:

Candidates table:

candidate_id	skill	proficiency
101	Python	5
101	Tableau	3
101	PostgreSQL	4
101	TensorFlow	2
102	Python	4
102	Tableau	5
102	PostgreSQL	4
102	R	4
103	Python	3
103	Tableau	5
103	PostgreSQL	5
103	Spark	4

Projects table:

project_id	skill	importance
501	Python	4
501	Tableau	3
501	PostgreSQL	5
502	Python	3
502	Tableau	4
502	R	2

Output:

project_id	candidate_id	score
501	101	105
502	102	130

Explanation:

- For Project 501, Candidate 101 has the highest score of 105. All other candidates have the same score but Candidate 101 has the lowest candidate_id among them.
- For Project 502, Candidate 102 has the highest score of 130.

The output table is ordered by project_id in ascending order.

Seen this question in a real interview before? 1/5

Yes No

Accepted 570 | Submissions 1.3K | Acceptance Rate 45.2%

Topics

Database

Discussion (4)