Table: `Teams`

```
+-------------+---------+
| Column Name | Type    |
+-------------+---------+
| team_name   | varchar |
+-------------+---------+
team_name is the primary key of this table.
Each row of this table shows the name of a team.
```

Write an SQL query that reports all the possible matches of the league. Note that every two teams play two matches with each other, with one team being the `home_team` once and the other time being the `away_team`.

Return the result table in **any order**.

The query result format is in the following example.

Example 1:**

```
Input:
Teams table:
+-------------+
| team_name   |
+-------------+
| Leetcode FC |
| Ahly SC     |
| Real Madrid |
+-------------+
Output:
+-------------+-------------+
| home_team   | away_team   |
+-------------+-------------+
| Real Madrid | Leetcode FC |
| Real Madrid | Ahly SC     |
| Leetcode FC | Real Madrid |
| Leetcode FC | Ahly SC     |
| Ahly SC     | Real Madrid |
| Ahly SC     | Leetcode FC |
+-------------+-------------+
Explanation: All the matches of the league are shown in the table.
```