# Problem 1699: Number of Calls Between Two Persons

## Problem Information

**Difficulty:** Medium
**Acceptance Rate:** 0.00%
**Paid Only:** No

## Problem Description

Table:

Calls

+-------------+---------+ | Column Name | Type | +-------------+---------+ | from_id | int | | to_id | int | | duration | int | +-------------+---------+ This table does not have a primary key (column with unique values), it may contain duplicates. This table contains the duration of a phone call between from_id and to_id. from_id != to_id

Write a solution to report the number of calls and the total call duration between each pair of distinct persons

(person1, person2)

where

person1 < person2

.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

Calls table: +---------+-------+----------+ | from_id | to_id | duration | +---------+-------+----------+ | 1 | 2 | 59 | | 2 | 1 | 11 | | 1 | 3 | 20 | | 3 | 4 | 100 | | 3 | 4 | 200 | | 3 | 4 | 200 | | 4 | 3 | 499 | +---------+-------+----------+

Output:

+---------+---------+-----------+----------------+ | person1 | person2 | call_count | total_duration | +---------+---------+-----------+----------------+ | 1 | 2 | 2 | 70 | | 1 | 3 | 1 | 20 | | 3 | 4 | 4 | 999 | +---------+---------+-----------+----------------+

Explanation:

Users 1 and 2 had 2 calls and the total duration is 70 (59 + 11). Users 1 and 3 had 1 call and the total duration is 20. Users 3 and 4 had 4 calls and the total duration is 999 (100 + 200 + 200 + 499).

## 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
```

**Oracle:**

```
/* Write your PL/SQL query statement below */
```

**Pandas:**

```
import pandas as pd


def number_of_calls(calls: pd.DataFrame) -> pd.DataFrame:
```

## Solutions

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