

# Problem 1126: Active Businesses

## Problem Information

Difficulty: **Medium**

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Table:

Events

+-----+-----+ | Column Name | Type | +-----+-----+ | business\_id | int | |  
event\_type | varchar | | occurrences | int | +-----+-----+ (business\_id, event\_type) is  
the primary key (combination of columns with unique values) of this table. Each row in the  
table logs the info that an event of some type occurred at some business for a number of  
times.

The

average activity

for a particular

event\_type

is the average

occurrences

across all companies that have this event.

An

active business

is a business that has

more than one

event\_type

such that their

occurrences

is

strictly greater

than the average activity for that event.

Write a solution to find all

active businesses

.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

Events table: +-----+-----+-----+ | business\_id | event\_type | occurrences |  
+-----+-----+-----+ | 1 | reviews | 7 | | 3 | reviews | 3 | | 1 | ads | 11 | | 2 | ads | 7  
| | 3 | ads | 6 | | 1 | page views | 3 | | 2 | page views | 12 | +-----+-----+-----+

Output:

```
+-----+ | business_id | +-----+ | 1 | +-----+
```

Explanation:

The average activity for each event can be calculated as follows: - 'reviews':  $(7+3)/2 = 5$  - 'ads':  $(11+7+6)/3 = 8$  - 'page views':  $(3+12)/2 = 7.5$  The business with id=1 has 7 'reviews' events (more than 5) and 11 'ads' events (more than 8), so it is an active business.

## 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 active_businesses(events: pd.DataFrame) -> pd.DataFrame:
```

## Solutions

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