

Problem 2142: The Number of Passengers in Each Bus I

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Table:

Buses

+-----+ | Column Name | Type | +-----+-----+ | bus_id | int | | arrival_time | int | +-----+-----+ bus_id is the column with unique values for this table. Each row of this table contains information about the arrival time of a bus at the LeetCode station. No two buses will arrive at the same time.

Table:

Passengers

+-----+ | Column Name | Type | +-----+-----+ | passenger_id | int | | arrival_time | int | +-----+-----+ passenger_id is the column with unique values for this table. Each row of this table contains information about the arrival time of a passenger at the LeetCode station.

Buses and passengers arrive at the LeetCode station. If a bus arrives at the station at time

t

bus

and a passenger arrived at time

t

passenger

where

t

passenger

<= t

bus

and the passenger did not catch any bus, the passenger will use that bus.

Write a solution to report the number of users that used each bus.

Return the result table ordered by

bus_id

in

ascending order

.

The result format is in the following example.

Example 1:

Input:

Buses table: +-----+-----+ | bus_id | arrival_time | +-----+-----+ | 1 | 2 || 2 | 4 ||
3 | 7 | +-----+-----+ Passengers table: +-----+-----+ | passenger_id |
arrival_time | +-----+-----+ | 11 | 1 || 12 | 5 || 13 | 6 || 14 | 7 |
+-----+-----+

Output:

```
+-----+-----+ | bus_id | passengers_cnt | +-----+-----+ | 1 | 1 | | 2 | 0 | | 3 | 3 | +-----+
```

Explanation:

- Passenger 11 arrives at time 1. - Bus 1 arrives at time 2 and collects passenger 11.
- Bus 2 arrives at time 4 and does not collect any passengers.
- Passenger 12 arrives at time 5. - Passenger 13 arrives at time 6. - Passenger 14 arrives at time 7. - Bus 3 arrives at time 7 and collects passengers 12, 13, and 14.

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 count_passengers_in_bus(buses: pd.DataFrame, passengers: pd.DataFrame) ->
    pd.DataFrame:
```

Solutions

MySQL Solution:

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