

# Problem 534: Game Play Analysis III

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 0.00%

**Paid Only:** No

## Problem Description

Table:

Activity

+-----+-----+ | Column Name | Type | +-----+-----+ | player\_id | int | |  
device\_id | int | | event\_date | date | | games\_played | int | +-----+-----+ (player\_id,  
event\_date) is the primary key (column with unique values) of this table. This table shows the  
activity of players of some games. Each row is a record of a player who logged in and played  
a number of games (possibly 0) before logging out on someday using some device.

Write a solution to report for each player and date, how many games played

so far

by the player. That is, the total number of games played by the player until that date. Check  
the example for clarity.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

```
Activity table: +-----+-----+-----+-----+ | player_id | device_id | event_date |
games_played | +-----+-----+-----+-----+ | 1 | 2 | 2016-03-01 | 5 | | 1 | 2 |
2016-05-02 | 6 | | 1 | 3 | 2017-06-25 | 1 | | 3 | 1 | 2016-03-02 | 0 | | 3 | 4 | 2018-07-03 | 5 |
+-----+-----+-----+-----+
```

Output:

```
+-----+-----+-----+ | player_id | event_date | games_played_so_far |
+-----+-----+-----+ | 1 | 2016-03-01 | 5 | | 1 | 2016-05-02 | 11 | | 1 |
2017-06-25 | 12 | | 3 | 2016-03-02 | 0 | | 3 | 2018-07-03 | 5 |
+-----+-----+-----+
```

Explanation:

For the player with id 1,  $5 + 6 = 11$  games played by 2016-05-02, and  $5 + 6 + 1 = 12$  games played by 2017-06-25. For the player with id 3,  $0 + 5 = 5$  games played by 2018-07-03. Note that for each player we only care about the days when the player logged in.

## Code Snippets

**MySQL:**

```
# Write your MySQL query statement below
```

**MS SQL Server:**

```
/* Write your T-SQL query statement below */
```

**Oracle:**

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

**Pandas:**

```
import pandas as pd

def gameplay_analysis(activity: pd.DataFrame) -> pd.DataFrame:
```

## Solutions

### MySQL Solution:

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# Write your MySQL query statement below
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### MS SQL Server Solution:

```
/* Write your T-SQL query statement below */
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### Pandas Solution:

```
import pandas as pd

def gameplay_analysis(activity: pd.DataFrame) -> pd.DataFrame:
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