Problem 1204: Last Person to Fit in the Bus

Problem Information

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

Problem Description

Table:

Queue

+-------------+---------+ | Column Name | Type | +-------------+---------+ | person_id | int | | person_name | varchar | | weight | int | | turn | int | +-------------+---------+ person_id column contains unique values. This table has the information about all people waiting for a bus. The person_id and turn columns will contain all numbers from 1 to n, where n is the number of rows in the table. turn determines the order of which the people will board the bus, where turn=1 denotes the first person to board and turn=n denotes the last person to board. weight is the weight of the person in kilograms.

There is a queue of people waiting to board a bus. However, the bus has a weight limit of

1000

kilograms

, so there may be some people who cannot board.

Write a solution to find the

person_name

of the

last person

that can fit on the bus without exceeding the weight limit. The test cases are generated such that the first person does not exceed the weight limit.

Note

that

only one

person can board the bus at any given turn.

The result format is in the following example.

Example 1:

Input:

Queue table: +-----------+-------------+--------+------+ | person_id | person_name | weight | turn | +-----------+-------------+--------+------+ | 5 | Alice | 250 | 1 | | 4 | Bob | 175 | 5 | | 3 | Alex | 350 | 2 | | 6 | John Cena | 400 | 3 | | 1 | Winston | 500 | 6 | | 2 | Marie | 200 | 4 | +-----------+-------------+--------+------+

Output:

+-------------+ | person_name | +-------------+ | John Cena | +-------------+

Explanation:

The folowing table is ordered by the turn for simplicity. +------+----+-----------+--------+--------------+ | Turn | ID | Name | Weight | Total Weight | +------+----+-----------+--------+--------------+ | 1 | 5 | Alice | 250 | 250 | | 2 | 3 | Alex | 350 | 600 | | 3 | 6 | John Cena | 400 | 1000 | (last person to board) | 4 | 2 | Marie | 200 | 1200 | (cannot board) | 5 | 4 | Bob | 175 | ___ | | 6 | 1 | Winston | 500 | ___ | +------+----+-----------+--------+--------------+

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 last_passenger(queue: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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