

1204. Last Person to Fit in the Bus

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.

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 following table is ordered by the turn for simplicity.

+-----+-----+-----+-----+-----+

Turn	ID	Name	Weight	Total Weight
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+-----+-----+-----+-----+-----+

1	5	Alice	250	250
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2	3	Alex	350	600
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3	6	John Cena	400	1000	(last person to board)
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4	2	Marie	200	1200	(cannot board)
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5	4	Bob	175	___
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6	1	Winston	500	___
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+-----+-----+-----+-----+-----+

Write your MySQL query statement below

with cte as(

select turn, person_id, person_name, weight, sum(weight) over(order by turn) as total from Queue)

select person_name from cte

where total <= 1000

order by total DESC

limit 1