

Problem 2783: Flight Occupancy and Waitlist Analysis

Problem Information

Difficulty: Medium

Acceptance Rate: 38.46%

Paid Only: Yes

Tags: Database

Problem Description

Table: `Flights`

+-----+-----+ | Column Name | Type | +-----+-----+ | flight_id | int | | capacity | int |
+-----+-----+ flight_id is the column with unique values for this table. Each row of this
table contains flight id and its capacity.

Table: `Passengers`

+-----+-----+ | Column Name | Type | +-----+-----+ | passenger_id | int | | flight_id | int |
+-----+-----+ passenger_id is the column with unique values for this table. Each
row of this table contains passenger id and flight id.

Passengers book tickets for flights in advance. If a passenger books a ticket for a flight and there are still empty seats available on the flight, the passenger ticket will be **confirmed**. However, the passenger will be on a **waitlist** if the flight is already at full capacity.

Write a solution to report the number of passengers who successfully booked a flight (got a seat) and the number of passengers who are on the waitlist for each flight.

Return the result table ordered by __`flight_id`__ in **ascending** __**order**__.

The result format is in the following example.

Example 1:

****Input:**** Flights table: +-----+-----+ | flight_id | capacity | +-----+-----+ | 1 | 2 || 2 | 2 || 3 | 1 | +-----+-----+ | passenger_id | flight_id | +-----+-----+ | 101 | 1 || 102 | 1 || 103 | 1 || 104 | 2 || 105 | 2 || 106 | 3 || 107 | 3 | +-----+-----+ | flight_id | booked_cnt | waitlist_cnt | +-----+-----+-----+ | 1 | 2 | 1 || 2 | 2 | 0 || 3 | 1 | 1 | +-----+-----+-----+ | **Explanation:** - Flight 1 has a capacity of 2. As there are 3 passengers who have booked tickets, only 2 passengers can get a seat. Therefore, 2 passengers are successfully booked, and 1 passenger is on the waitlist. - Flight 2 has a capacity of 2. Since there are exactly 2 passengers who booked tickets, everyone can secure a seat. As a result, 2 passengers successfully booked their seats and there are no passengers on the waitlist. - Flight 3 has a capacity of 1. As there are 2 passengers who have booked tickets, only 1 passenger can get a seat. Therefore, 1 passenger is successfully booked, and 1 passenger is on the waitlist.

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
```