

2783. Flight Occupancy and Waitlist Analysis

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	
+-----+-----+		
Passengers table:		
+-----+-----+		
passenger_id	flight_id	
+-----+-----+		
101	1	
102	1	
103	1	
104	2	
105	2	
106	3	
107	3	
+-----+-----+		
Output:		
+-----+-----+-----+		
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.		

