2701. Consecutive Transactions with Increasing Amounts Premium

SQL Schema > Pandas Schema >

Table: Transactions

Column Name	Туре
transaction_id	int
customer_id	int
transaction_date	date
amount	int

transaction_id is the primary key of this table.

Each row contains information about transactions that includes unique (customer_id, transaction_date) along with the corresponding customer_id and amount.

Write an SQL query to find the customers who have made consecutive transactions with increasing amount for at least three consecutive days. Include the customer_id, start date of the consecutive transactions period and the end date of the consecutive transactions period. There can be multiple consecutive transactions by a customer.

Return the result table ordered by <code>customer_id</code> in ascending order.

The query result format is in the following example.

Example 1:

Input: Transactions table:

Transactions table.				
transaction_id	customer_id	transaction_date	amount	
1	101	2023-05-01	100	
2	101	2023-05-02	150	
3	101	2023-05-03	200	
4	102	2023-05-01	50	
5	102	2023-05-03	100	
6	102	2023-05-04	200	
7	105	2023-05-01	100	
8	105	2023-05-02	150	
9	105	2023-05-03	200	
10	105	2023-05-04	300	
11	105	2023-05-12	250	
12	105	2023-05-13	260	
13	105	2023-05-14	270	

Output:

customer_id	consecutive_start	consecutive_end
101	2023-05-01	2023–05–03
105	2023-05-01	2023-05-04
105	2023-05-12	2023-05-14
1		

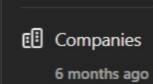
Explanation:

- customer_id 101 has made consecutive transactions with increasing amounts from May 1st, 2023, to May 3rd, 2023
- customer_id 102 does not have any consecutive transactions for at least 3 days.
- customer_id 105 has two sets of consecutive transactions: from May 1st, 2023, to May 4th, 2023, and from May 12th, 2023, to May 14th, 2023.
 customer_id is sorted in ascending order.

Seen this question in a real interview before? 1/5

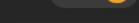


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♡ Topics

Database





Discussion (4)