

Day 19 - Delayed Orders and Free pizzas

Problem Statement:

An order is considered delayed if it takes 30 minutes more than the order time. If the order is delayed, the whole order (containing multiple pizzas) is given for free.

We need to identify the percentage of delayed order for each month and also display the total no of free pizzas given each month

Table1

dbo.pizza_delivery
Columns
order_id (int, not null)
order_time (datetime, not null)
expected_delivery (datetime, not null)
actual_delivery (datetime, null)
no_of_pizzas (int, not null)
price (float, not null)

SampleInput:

INPUT					
ORDER_ID	ORDER_TIME	EXPECTED_DELIVERY	ACTUAL_DELIVERY	NO_OF_PIZZAS	PRICE
1	09/29/2023 21:22	09/29/2023 21:52	09/29/2023 21:52	8	59.25
2	06/03/2023 19:32	06/03/2023 20:02	06/03/2023 20:02	2	82.56
3	03/19/2023 18:14	03/19/2023 18:44	03/19/2023 18:44	5	77.7
4	06/21/2023 18:45	06/21/2023 19:15	06/21/2023 19:15	3	71.1
5	11/16/2023 20:24	11/16/2023 20:54	11/16/2023 20:54	1	72.74
6	06/01/2023 0:17	06/01/2023 0:47	06/01/2023 0:47	9	62.01
7	04/15/2023 15:29	04/15/2023 15:59	04/15/2023 15:59	8	59.82
8	11/03/2023 12:35	11/03/2023 13:05	11/03/2023 13:05	5	95.9
9	01/20/2023 21:36	01/20/2023 22:06	01/20/2023 22:06	6	52.15
10	07/31/2023 13:43	07/31/2023 14:13	07/31/2023 14:13	10	81.69
11	04/22/2023 17:13	04/22/2023 17:43	04/22/2023 17:43	6	59.05
12	07/24/2023 23:37	07/25/2023 0:07	07/25/2023 0:07	2	76.84
13	02/28/2023 10:21	02/28/2023 10:51	02/28/2023 10:51	1	27.16

SOLUTION

```
select FORMAT(order_time, 'MMM-yy') as period,  
  
       cast(sum(case when actual_delivery > expected_delivery then 1  
else 0 end)*1.0/ count(order_id)*100 as decimal(4,2)) as  
delayed_delivery_percantage,  
  
       sum(case when actual_delivery > expected_delivery then  
no_of_pizzas else 0 end) as free_pizzas  
  
from pizza_delivery  
  
group by FORMAT(order_time, 'MMM-yy')
```

	period	delayed_percantage	free_pizzas
1	Apr-23	13.10	77
2	Aug-23	10.75	63
3	Dec-23	14.29	58
4	Feb-23	11.83	49
5	Jan-23	8.70	31
6	Jul-23	15.07	43
7	Jun-23	10.00	48
8	Mar-23	15.00	61
9	May-23	14.12	65
10	Nov-23	21.65	105
11	Oct-23	15.05	60
12	Sep-23	16.87	89