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```sql
with temp_year_month as (
    select distinct YearMonth as YearMonth,
    row_number() over (order by YearMonth) as temp_num
    FROM `nth-micron-331409.Supermarket.data`
    group by YearMonth
),
month_summarize as (
SELECT a.YearMonth, -- prep yearmonth จากทำ left(cast(SHOP_DATE as string),7)
temp_num,
CUST_CODE,
round(sum(SPEND),2) as gmv
FROM `nth-micron-331409.Supermarket.data` as a
left join temp_year_month on a.YearMonth = temp_year_month.YearMonth
group by YearMonth, CUST_CODE, temp_num
)
,
first_dollar as (
    select CUST_CODE,
    min(YearMonth) as first_dollar_month
    FROM `nth-micron-331409.Supermarket.data`
group by CUST_CODE
),
label_user as (
select m1.YearMonth,
       m1.CUST_CODE,
       first_dollar.first_dollar_month,
       m_last.YearMonth as order_last_month, -- not null if had order from last month
       m_next.YearMonth as order_next_month  -- not null if had order next month
from month_summarize as m1
left join first_dollar on m1.CUST_CODE = first_dollar.CUST_CODE
left join month_summarize as m_last on m1.temp_num = (m_last.temp_num +1) and
m1.CUST_CODE = m_last.CUST_CODE
left join month_summarize as m_next on m1.temp_num = (m_next.temp_num -1) and
m1.CUST_CODE = m_next.CUST_CODE
-- left join month_summarize as m_last on m1.YearMonth = (m_last.YearMonth +1) and
m1.CUST_CODE = m_last.CUST_CODE
-- left join month_summarize as m_next on m1.YearMonth = (m_next.YearMonth -1) and
m1.CUST_CODE = m_next.CUST_CODE
-- where m1.YearMonth >= 200801
```

```
)
-- select * from label_user
select YearMonth,
        sum(if(YearMonth = first_dollar_month, 1,0)) as number_of_new, -- buy this
month firsttime
        count(order_last_month) as number_of_repeat, -- buy this month and also
lastmonth
        sum(if(order_last_month is null and first_dollar_month < YearMonth,1,0))
number_of_reactive, -- last month didn't buy buy have order berfore
        number_of_churn
from label_user
left join
    (
        select order_next_month,
            count(order_next_month) as number_of_churn
        from label_user
        group by order_next_month
    ) as churn on label_user.YearMonth = churn.order_next_month
group by yearmonth, number_of_churn
order by yearmonth
```