

SQL Code

```
SELECT year_month,
COUNT(CASE WHEN cust_type = "New Customer" THEN 1 END) as NEW_CUSTOMER,
COUNT(CASE WHEN cust_type = "Repeat Customer" THEN 1 END) as REPEAT_CUSTOMER,
COUNT(CASE WHEN cust_type = "Reactivated Customer" THEN 1 END) as
REACTIVATED_CUSTOMER,
-(LAG(COUNT(year_month),1) OVER (ORDER BY year_month) - COUNT(CASE WHEN cust_type
="Repeat Customer" THEN 1 END)) as CHURN_CUSTOMER
FROM (SELECT year_month,
CASE WHEN customer_order_sequence = 1 THEN 'New Customer'
WHEN month_between_orders = 1 THEN 'Repeat Customer'
WHEN month_between_orders > 1 THEN 'Reactivated Customer'
END AS cust_type,customer_order_sequence,previous_order_month,
CASE WHEN month_between_orders IS NULL THEN 0
ELSE month_between_orders END AS month_between_orders
FROM (SELECT year_month,cust_code,customer_order_sequence,
CASE WHEN previous_order_month IS NULL THEN year_month
ELSE previous_order_month END AS previous_order_month,
DATE_DIFF(PARSE_DATE("%Y%m",year_month),
PARSE_DATE("%Y%m",previous_order_month), month) AS month_between_orders,
FROM (SELECT year_month,cust_code,
ROW_NUMBER() OVER (PARTITION BY cust_code ORDER BY year_month ASC) as
customer_order_sequence,
LAG(year_month) OVER (PARTITION BY cust_code ORDER BY year_month ASC) as
previous_order_month,
FROM (SELECT CUST_CODE,
SUBSTRING(CAST(SHOP_DATE AS STRING), 1, 6) AS year_month ,
FROM `Churn_dashboard.supermarket-data.Sample_table`
WHERE cust_code is not null GROUP BY cust_code, year_month))))
GROUP BY year_month
ORDER BY year_month
```

Query results

Row	year_month	NEW_CUSTOMER	REPEAT_CUSTOMER	REACTIVATED_CUSTOMER	CHURN_CUSTOMER
1	200604	1003	0	0	null
2	200605	544	675	0	-328
3	200606	382	787	82	-432
4	200607	385	843	181	-408
5	200608	366	887	197	-522
6	200609	328	931	238	-519
7	200610	255	940	254	-557
8	200611	239	927	277	-522
9	200612	226	940	319	-503
10	200701	175	924	306	-561
11	200702	151	897	280	-508

Churn Dashboard

