

CUSTOMER MOVEMENT ANALYSIS

1. SQL

SELECT

```

SHOP_MONTH,
NEW_STATUS,
REPEAT_STATUS,
REACTIVATED_STATUS,
TOTAL, LAG(TOTAL, 1)OVER(ORDER BY SHOP_MONTH ASC) as PREVIOUS_TOTAL,
REPEAT_STATUS - LAG(TOTAL, 1)OVER(ORDER BY SHOP_MONTH ASC) as CHURN_STATUS

```

FROM

(SELECT

```

SHOP_MONTH,
COUNT(CASE WHEN STATUS = 'NEW' THEN CUST_CODE ELSE NULL END) as NEW_STATUS,
COUNT(CASE WHEN STATUS = 'REPEAT' THEN CUST_CODE ELSE NULL END) as REPEAT_STATUS,
COUNT(CASE WHEN STATUS = 'REACTIVATED' THEN CUST_CODE ELSE NULL END) as REACTIVATED_STATUS,
COUNT(STATUS) as TOTAL

```

FROM

(SELECT

```

PREVIOUS_MONTH, SHOP_MONTH, CUST_CODE,
CASE
    WHEN DATE_DIFF(SHOP_MONTH, PREVIOUS_MONTH, MONTH) IS NULL THEN 'NEW'
    WHEN DATE_DIFF(SHOP_MONTH, PREVIOUS_MONTH, MONTH) = 1 THEN 'REPEAT'
    WHEN DATE_DIFF(SHOP_MONTH, PREVIOUS_MONTH, MONTH) > 1 THEN 'REACTIVATED'
ELSE NULL END AS STATUS

```

FROM

(SELECT

```

LAG(SHOP_MONTH, 1)OVER(PARTITION BY CUST_CODE ORDER BY SHOP_MONTH ASC) as PREVIOUS_MONTH,
SHOP_MONTH,
CUST_CODE

```

FROM

(SELECT

```

DISTINCT DATE_TRUNC(PARSE_DATE('%Y%m%d', CAST(SHOP_DATE as STRING)),MONTH) as SHOP_MONTH,
CUST_CODE
FROM `bads7105-supermarket.supermarket_data.supermarket_data`
WHERE CUST_CODE IS NOT NULL

```

)

)

)

GROUP BY SHOP_MONTH

)

ORDER BY SHOP_MONTH

2. GRAPH

