Homework 10
Customer Movement Analysis

BADS7105 – CRM Analytics and Intelligence
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01 SQL SCRIPT

👤 HW 10 - Customer Movement Analysis

```sql
1  with customer as
2  (
3  select distinct cust_code ,
4  DATE_TRUNC(PARSE_DATE("%Y%m%d", CAST(SHOP_DATE AS STRING)) , Month) as cur_month ,
5  from `homework-10-cust-movement.DB_SUPERMARKET.CUSTOMER MOVEMENT`
6  ),
7  customer_month as
8  (
9  select cust_code, cur_month, LAG(cur_month,1) OVER (PARTITION BY cust_code ORDER BY cur_month) AS prev_month
10  FROM customer
11  ),
12  Report_cust1 as (
13  SELECT cust_code, cur_month , prev_month,
14  CASE WHEN DATE_DIFF (cur_month, prev_month, MONTH) = 1  THEN 'Repeat'
15      WHEN DATE_DIFF(cur_month, prev_month, MONTH) > 1 THEN 'Reactivated'
16      WHEN DATE_DIFF(cur_month, prev_month, MONTH) IS NULL THEN 'New' End as Status
17  FROM customer_month
18  ),
19  Report_cust2 as (
20  select cust_code ,cur_month ,DATE_ADD(cur_month, INTERVAL 1 MONTH) as Future_month ,
21  case when cur_month <= (select MAX(cur_month) from customer) then 'Churn' end as status
22  from (
23  select cust_code , cur_month ,ROW_NUMBER() OVER ( PARTITION BY cust_code ORDER BY cur_month DESC ) as rwn
24  from customer) t where rwn = 1)
25
26
27  select cur_month ,status ,count(Cust_code) from(
28  select cust_code , cur_month , status
29  from Report_cust1
30
31  UNION ALL
32  select cust_code , Future_month , status
33  from Report_cust2 where Future_month <= (select MAX(cur_month) from customer) )
34
35  group by cur_month ,status
```
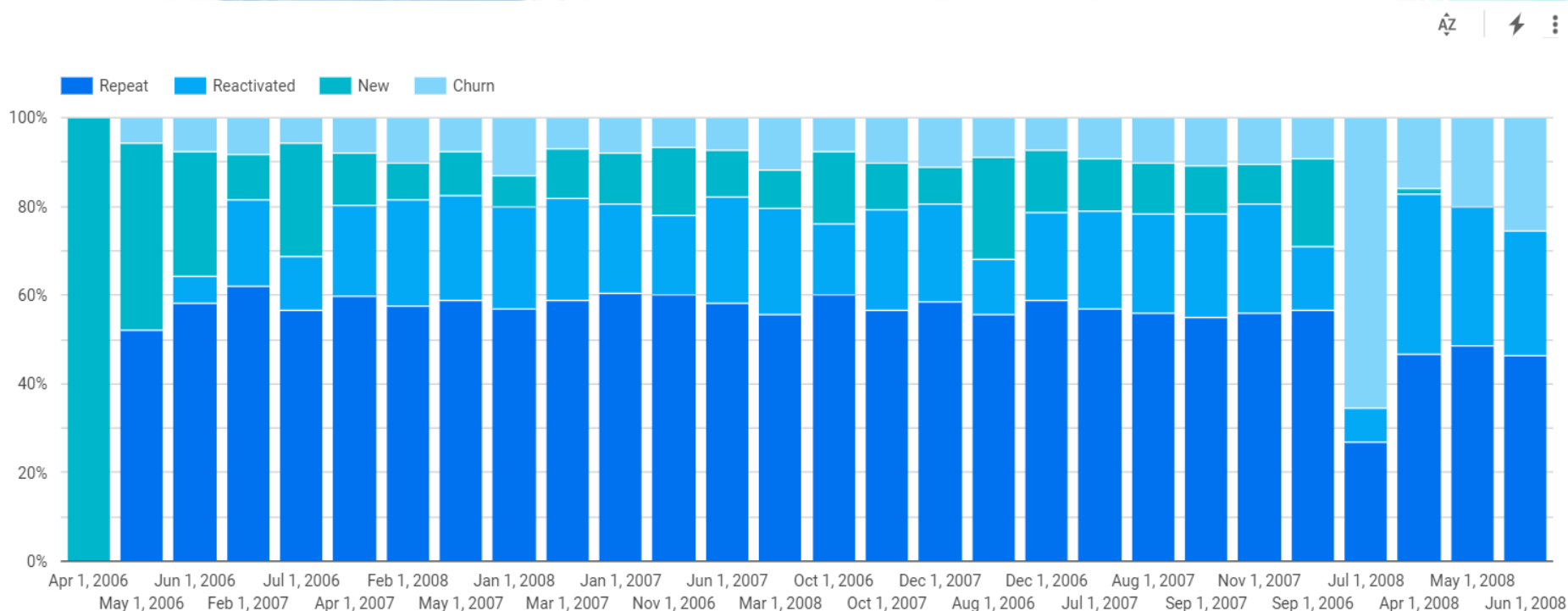
Query results   ⬇ SAVE RESULTS

Query complete (19.0 sec elapsed, 517.7 MB processed)

Job information   **Results**   JSON   Execution details

Row	cur_month	status	f0_
1	2006-11-01	Repeat	927
2	2007-04-01	New	176
3	2007-09-01	Repeat	889
4	2007-08-01	Reactivated	359
5	2008-02-01	Churn	154
6	2008-07-01	Churn	1134
7	2008-01-01	Reactivated	348
8	2008-05-01	Reactivated	625
9	2006-06-01	Churn	102
10	2006-04-01	New	1003
11	2006-12-01	New	226

02 VISULIZATION
100% STACK BAR CHART