**with** cte **as**( **select** contract,

datediff(**'2022-09-01'**, **max**(purchase\_date)) **as** Recency , **sum**(GMV)/timestampdiff(**year**, **max**(created\_date), **'2022-09-01'**) **as** Monetary , **count**(customerid)\*1.0/ timestampdiff(**year**, **max**(created\_date), **'2022-09-01'**) **as** Frequency ,

**row\_number**() **over**(**order by** datediff(**'2022-09-01'**, **max**(purchase\_date))) **as**

rn\_recency ,

**row\_number**() **over**(**order by sum**(GMV)/timestampdiff(**year**, **max**(created\_date), **'2022- 09-01'**) **desc** ) **as** rn\_monetary ,

**row\_number**() **over**(**order by count**(customerid)\*1.0/ timestampdiff(**year**,

**max**(created\_date), **'2022-09-01'**) **desc** ) **as** rn\_frequency

**from** customer\_registered cr

**join** customer\_transaction ct **on** cr.id = ct.customerid

**where** ct.customerid <> 0 **and** cr.stopdate = 0

**group by** contract

**order by count**(customerid)\*1.0/ timestampdiff(**year**, **max**(created\_date), **'2022-09- 01'**) **desc**

),

customer\_statistics **as**(

**select** Contract, Recency, Frequency, Monetary ,

**case when** rn\_recency >= (**select min**(rn\_recency) **from** cte) **and** rn\_recency < (**select count**(rn\_recency)\*0.25 **from** cte) **then** 4

**when** rn\_recency >= (**select count**(rn\_recency)\*0.25 **from** cte) **and** rn\_recency < (**select count**(rn\_recency)\*0.5 **from** cte) **then** 3

**when** rn\_recency >= (**select count**(rn\_recency)\*0.5 **from** cte) **and** rn\_recency < (**select count**(rn\_recency)\*0.75 **from** cte) **then** 2

**else** 1 **end as** R,

**case when** rn\_frequency >= (**select min**(rn\_frequency) **from** cte) **and** rn\_frequency < (**select count**(rn\_frequency)\*0.25 **from** cte) **then** 1

**when** rn\_frequency >= (**select count**(rn\_frequency)\*0.25 **from** cte) **and**

rn\_frequency < (**select count**(rn\_frequency)\*0.5 **from** cte) **then** 2

**when** rn\_frequency >= (**select count**(rn\_frequency)\*0.5 **from** cte) **and**

rn\_frequency < (**select count**(rn\_frequency)\*0.75 **from** cte) **then** 3

**else** 4 **end as** F,

**case when** rn\_monetary >= (**select min**(rn\_monetary) **from** cte) **and** rn\_monetary < (**select count**(rn\_monetary)\*0.25 **from** cte) **then** 1

**when** rn\_monetary >= (**select count**(rn\_monetary)\*0.25 **from** cte) **and** rn\_monetary

< (**select count**(rn\_monetary)\*0.5 **from** cte) **then** 2

**when** rn\_monetary >= (**select count**(rn\_monetary)\*0.5 **from** cte) **and** rn\_monetary

< (**select count**(rn\_monetary)\*0.75 **from** cte) **then** 3

**else** 4 **end as** M

**from** cte

where recency is not null

),

customer\_RFM **as** (

**select** \*, concat(R,F,M) **as** RFM

**from** customer\_statistics

)

**select** \*,

**case when** rfm **in** (444, 443, 434, 344) **then 'Champion'**

**when** rfm **in** (442, 441, 432, 431, 433, 343, 342, 341) **then 'Loyal Customers'**

**when** rfm **in** (424, 423, 324, 323, 413, 414, 343, 334) **then 'Potential'**

**when** rfm **in** (333, 332, 331, 313) **then 'Promising'**

**when** rfm **in** (244, 234, 243, 233, 224, 214, 213, 134, 144, 143, 133) **then**

**'Need Attention'**

**when** rfm **in** (111, 112, 113, 114, 121, 122, 123, 221, 211, 222) **then 'Lost'**

**else 'Other' end as** Cus\_type

**from** customer\_RFM