**create** **database** rfm\_original

**select** \*

**from** rfm\_original.customer\_registered *cr*

**limit** 10

**create** **table** rfm\_original.cast\_date **as** (

**select** id, contract, locationid, branchcode, status,**cast**(created\_date **as** **date**) **as** create\_date, **cast**(stopdate **as** **date**) **as** stopdate

**from** rfm\_original.customer\_registered cr

);

**drop** **table** rfm\_original.cast\_date

**create** **table** rfm\_original.Customer\_Statistics **as** (

**select** \*,

**row\_number** () **over**(**order** **by** recency) **as** rn\_recency,

**row\_number** () **over**(**order** **by** frequency) **as** rn\_frequency,

**row\_number** () **over**(**order** **by** monetary **desc**) **as** rn\_monetary

**from**

(

**select** customerid,contract,

(**datediff**(**'2022-09-01'**, **max**(purchase\_date))) **as** recency ,

(**count**(customerid)/ **datediff**(**'2022-09-01'**,**max**(create\_date))) **as** frequency,

(**coalesce** ((1.0\***sum**(gmv)/**datediff**(**'2022-09-01'**,**min**(create\_date))),0)) **as** monetary

**from** rfm\_original.cast\_date cd

**join** rfm\_original.customer\_transaction ct **on** CT.CustomerID = cd.ID

**where** customerid <> 0 **and** stopdate **is** **null**

**group** **by** contract

) **as** sub1);

**create** **table** rfm\_original.mapping\_customer (

**with** calculate\_mapping **as**(

**select** \*,

**case**

**when** rn\_recency >= (**select** **min**(rn\_recency) **from** rfm\_original.Customer\_Statistics) **and** rn\_recency < (**select** **count**(rn\_recency)\*0.25 **from** rfm\_original.Customer\_Statistics) **then** 4

**when** rn\_recency >= (**select** **count**(rn\_recency)\*0.25 **from** rfm\_original.Customer\_Statistics) **and** rn\_recency < (**select** **count**(rn\_recency)\*0.5 **from** rfm\_original.Customer\_Statistics) **then** 3

**when** rn\_recency >= (**select** **min**(rn\_recency)\*0.5 **from** rfm\_original.Customer\_Statistics) **and** rn\_recency < (**select** **count**(rn\_recency)\*0.75 **from** rfm\_original.Customer\_Statistics) **then** 2

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

**case**

**when** rn\_frequency >= (**select** **count**(rn\_frequency) **from** rfm\_original.Customer\_Statistics) **and** rn\_frequency < (**select** **count**(rn\_frequency)\*0.25 **from** rfm\_original.Customer\_Statistics) **then** 1

**when** rn\_frequency >= (**select** **count**(rn\_frequency)\*0.25 **from** rfm\_original.Customer\_Statistics) **and** rn\_frequency < (**select** **count**(rn\_frequency)\*0.5 **from** rfm\_original.Customer\_Statistics) **then** 2

**when** rn\_frequency >= (**select** **count**(rn\_frequency)\*0.5 **from** rfm\_original.Customer\_Statistics) **and** rn\_frequency < (**select** **count**(rn\_frequency)\*0.75 **from** rfm\_original.Customer\_Statistics) **then** 3

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

**case**

**when** rn\_monetary >= (**select** **count**(rn\_monetary) **from** rfm\_original.Customer\_Statistics) **and** rn\_monetary < (**select** **count**(rn\_monetary)\*0.25 **from** rfm\_original.Customer\_Statistics) **then** 1

**when** rn\_monetary >= (**select** **count**(rn\_monetary)\*0.25 **from** rfm\_original.Customer\_Statistics) **and** rn\_monetary < (**select** **count**(rn\_monetary)\*0.5 **from** rfm\_original.Customer\_Statistics) **then** 2

**when** rn\_monetary >= (**select** **count**(rn\_monetary)\*0.5 **from** rfm\_original.Customer\_Statistics) **and** rn\_monetary < (**select** **count**(rn\_monetary)\*0.75 **from** rfm\_original.Customer\_Statistics) **then** 3

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

**from** rfm\_original.Customer\_Statistics)

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

**from** calculate\_mapping

);

/\*NAME THEM\*/

**create** **table** rfm\_original.group\_customer **as** (

**select** customerid,RFM\_ppoint,Categories\_RFM

**from**

(**select** \*,

**case**

**when** RFM\_ppoint **in** (444,434,443,344,433,333,334,343) **then** **'Star'**

**when** RFM\_ppoint **in** (144,424,432,223,123,423,323,143,243,233,133,124,224,324) **then** **'Question mark'**

**when** RFM\_ppoint **in** (244,144,234,144,134,432,332,442,342) **then** **'Cow'**

**when** RFM\_ppoint **in** (132,232,242,142,422,322,222) **then** **'Dog'**

**end** **as** Categories\_RFM

**from** rfm\_original.mapping\_customer) **as** sub3)

/\* find which group you like here\*/

**SELECT**

**SUM**(**CASE** **WHEN** Categories\_RFM = **'star'** **THEN** 1 **ELSE** 0 **END**) **AS** *star\_count*,

**SUM**(**CASE** **WHEN** Categories\_RFM = **'question mark'** **THEN** 1 **ELSE** 0 **END**) **AS** *question\_mark\_count*,

**SUM**(**CASE** **WHEN** Categories\_RFM = **'cow'** **THEN** 1 **ELSE** 0 **END**) **AS** *cow\_count*,

**SUM**(**CASE** **WHEN** Categories\_RFM = **'dog'** **THEN** 1 **ELSE** 0 **END**) **AS** *dog\_count*

**FROM** rfm\_original.group\_customer *gc*