**BT MYSQL**

USE classicmodels123;  
  
các bước thao tác

1

CREATE TABLE RFM\_model(

CustomerNumber INT PRIMARY KEY,

CustomerName VARCHAR(255) NOT NULL,

Recency INT,

Frequency INT NOT NULL,

Monetary DOUBLE NOT NULL

);

2

USE classicmodels123;

INSERT INTO RFM\_model

SELECT customerNumber, customerName, (SELECT MIN(DATEDIFF('2005/06/02', orderDate))

FROM orders

WHERE customerNumber = c.customerNumber) AS Recency,

(SELECT COUNT(\*)

FROM orders

WHERE customerNumber = c.customerNumber) AS Frequency,

(SELECT IF(SUM(quantityOrdered \* priceEach) IS NULL, 0, SUM(quantityOrdered \* priceEach))

FROM orderDetails

WHERE orderNumber IN (SELECT orderNumber

FROM orders

WHERE customerNumber = c.customerNumber)) AS Monetary

FROM customers c;

Câu 1,2,3,4

SELECT

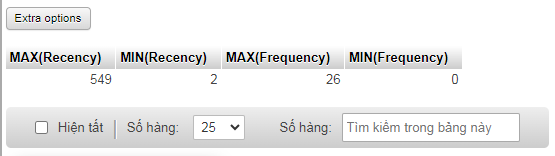
MAX(Recency) ,

MIN(Recency),

MAX(Frequency) ,

MIN(Frequency)

FROM RFM\_Model;



Câu 5, 6

ALTER TABLE RFM\_model

ADD COLUMN Recency\_score DOUBLE,

ADD COLUMN Frequency\_score DOUBLE;

UPDATE RFM\_model

SET Recency\_score =

CASE

WHEN Recency IS NULL THEN 0

ELSE

((SELECT MAX(Recency) FROM RFM\_model) - Recency) \* 4 /

((SELECT MAX(Recency) FROM RFM\_model WHERE Recency IS NOT NULL) - (SELECT MIN(Recency) FROM RFM\_model WHERE Recency IS NOT NULL)) + 1

END,

Frequency\_score =

CASE

WHEN Frequency IS NULL THEN 0

ELSE

(Frequency - (SELECT MIN(Frequency) FROM RFM\_model WHERE Recency IS NOT NULL)) \* 4 /

((SELECT MAX(Frequency) FROM RFM\_model WHERE Recency IS NOT NULL) - (SELECT MIN(Frequency) FROM RFM\_model WHERE Recency IS NOT NULL)) + 1

END;

câu 7

ALTER TABLE RFM\_model

ADD COLUMN (Type VARCHAR(255));

UPDATE RFM\_model

SET Type =

CASE

WHEN (0 <= Recency\_Score AND Recency\_Score < 2) AND (0 <= Frequency\_Score AND Frequency\_Score < 2) THEN 'Hibernating'

WHEN (0 <= Recency\_Score AND Recency\_Score < 2) AND (2 <= Frequency\_Score AND Frequency\_Score < 4) THEN 'At Risk'

WHEN (0 <= Recency\_Score AND Recency\_Score < 2) AND (4 <= Frequency\_Score AND Frequency\_Score <= 5) THEN "Can't Lose Them"

WHEN (2 <= Recency\_Score AND Recency\_Score < 3) AND (0 <= Frequency\_Score AND Frequency\_Score < 2) THEN 'About To Sleep'

WHEN (2 <= Recency\_Score AND Recency\_Score < 3) AND (2 <= Frequency\_Score AND Frequency\_Score < 3) THEN 'Need Attention'

WHEN (3 <= Recency\_Score AND Recency\_Score < 4) AND (0 <= Frequency\_Score AND Frequency\_Score < 1) THEN 'Promising'

WHEN (4 <= Recency\_Score AND Recency\_Score <= 5) AND (0 <= Frequency\_Score AND Frequency\_Score < 1) THEN 'New Customer'

WHEN (3 <= Recency\_Score AND Recency\_Score <= 5) AND (1 <= Frequency\_Score AND Frequency\_Score < 3) THEN 'Potential Loyallists'

WHEN (2 <= Recency\_Score AND Recency\_Score < 4) AND (3 <= Frequency\_Score AND Frequency\_Score <= 5) THEN 'Loyal Customers'

ELSE 'Champions'

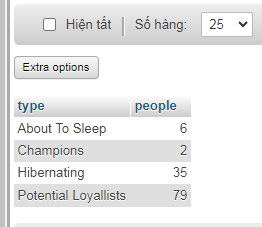
END;

NOTE: Số lượng người trong mỗi kiểu khách hàng

SELECT type, COUNT(\*) AS people

FROM RFM\_model

GROUP BY type;



Kết quả truy vấn có 122 hàng, Bảng rfm\_model hiển thị  
  
