**DATABASE FINAL EXAM**

**Question 1:** RFM Analysis

RFM model uses sales data to segment a pool of customers based on their purchasing behavior. The resulting customer segments are neatly ordered from most valuable to least valuable. This makes it straightforward to identify best customers.

In each customer record you must maintain three pieces of information:

1. Recency – The interval from the date of making statistics (2/6/2005) to the date of the most recent purchase by the customer.
2. A counter for the Frequency – the numbers of times the customer has made an order.
3. A counter for the Monetary amount – the total money that the customer hay ordered.

Using classicmodel database, please write 1 query that calculates the above 3 indexes for each customer who hay ever ordered on the system. The output has the following format: CustomerName, CustomerNumber, Recency, Frequency, Monetary.

**Question 2:** Best customers

Based on the results of the above query, write a query show a list of customers with **Recency >= 5 or Monetary >= $500,000.**

**Question 3:** Write a query to display a **name**, **text description**, and the **total quantity of products** **of productline** that have **total quantity of products** greater than 50.000. Sort in descending order of quantity. (Hint: total quantity of products = in stock + sold).

**Question 4:** Write **01** query to display name, total purchase amount, total paid amount, and total debt of small customers whose total purchase amount is less than %100,000.

**Question 5:** Create a new table based on the definition of table **payments**, including any column attributes and indexes defined in the table products, name it **new\_payments** (Hint: use LIKE)

Insert into table **new\_payments** all entries of table **payments** that have the **amount** greater than **50.000**.

**Question 6:** Write a query to display information of **productlines** and their corresponding inventory **money** (Hint: inventory money could be calculated using buy price).