Project Report: RFM Customer Segmentation Analysis

1. Introduction: What is RFM Analysis?

RFM Analysis is a simple but powerful way to understand our customers. It helps us group customers based on their shopping habits by looking at three key factors:

- **Recency (R):** How recently did a customer make a purchase?

- **Frequency (F):** How often do they purchase?

- **Monetary (M):** How much money do they spend?

By understanding these factors, we can identify our best customers, find customers who might be leaving, and send the right marketing message to the right person.

2. Our Process: How We Performed the Analysis

For this project, we followed a clear, step-by-step process to segment our customers:

1.

     Calculated RFM Values: First, we used **Power Query** in Power BI to calculate the Recency (days since last purchase), Frequency (total unique orders), and Monetary (total sales) value for every single customer in our dataset.

2.

     Assigned RFM Scores: Next, we used **DAX** to create calculated columns. These formulas ranked each customer and gave them a score from 1 to 5 for each of the R, F, and M values. For example, the most recent customers got a Recency score of 5, while the customers who purchased most often got a Frequency score of 5.

3.

     Created Customer Segments: Finally, we used another DAX formula with a SWITCH statement to give each customer a clear segment name based on their scores, such as "Champions", "At Risk", or "New Customers".

3. The Results: Our Customer Segments

After the analysis, we created several important customer segments. The charts below show how many customers are in each segment and how much money each segment brings to the business.

(Bhai, yahan aap apne RFM charts ka screenshot add kar dena)

From the charts, we can see our main customer groups. For example, our **"Champions"** are our best customers who buy recently and often, while our **"At Risk"** customers are those who used to be good but haven't purchased in a while.

4. Actionable Insights: What to Do Next

This analysis is not just about numbers; it's about taking action. Here are some simple recommendations for the business:

- **For Champions**: Reward these customers with exclusive offers and a loyalty program to keep them happy. They are our most valuable asset.

- **For At Risk Customers**: Send them a personalized "We miss you!" email with a special discount to encourage them to come back before we lose them forever.

- **For New Customers**: Welcome them with a special first-time buyer discount on their next purchase to encourage them to become loyal.

- **For Lost Customers**: Try to win them back with a special, high-value offer. If they don't respond, it's best not to spend too much money on this group.

5. Conclusion

In conclusion, RFM analysis has given us a very clear picture of our customer base. By using these segments, the business can stop sending the same marketing message to everyone. Instead, it can create targeted marketing strategies that are more effective, save money, and help grow sales significantly.