Business Requirement Document (BRD)

Project Name: Store Database Management System (PART - 2)

1. Objective: The objective of Phase 2 is to build analytical capabilities on top of the structured database developed in Phase 1. This phase will focus on generating reports and insights that help improve business decisions related to sales, inventory, employee performance, and customer behavior.

2. Business Objectives:

- Generate key sales insights for better decision-making.
- Identify top-selling products and underperforming inventory.
- Enhance customer segmentation by analyzing purchase behavior.
- Optimize employee performance tracking and recognition.
- Improve store inventory management by identifying low-stock products.
- Rank products and employees based on performance metrics.

3. Functional Requirements (Task to do):

3.1 Sales Analysis

- Calculate total revenue generated by each store.
- Identify top 5 best-selling products.
- Calculate monthly sales trends to observe seasonality and growth.
- Identify Top-Selling Product per Category
- List of Products with Running Total of Sales

3.2 Customer Analysis

- Identify customers with the highest purchases.
- Find customers who have not placed any orders.
- Identify customers who have placed at least 3 orders and spent more than \$25,000.

3.3 Inventory Management

• Identify low-stock products (below 50 items in inventory).

3.4 Employee Performance Analysis

- Identify the top 5 employees based on order transactions handled.
- Identify staff members with the highest number of orders processed.
- Rank Staff Based on Revenue Generated

3.5 Advanced Reporting

- Rank products by sales volume.
- Compare Monthly Sales with Previous Month.
- Assign Row Number to Orders by Each Customer.

4. Reporting Mechanisms:

- Create SQL-based reports that generate insights.
- Use analytical functions like SUM(), COUNT(), AVG(), RANK(), and ROW_NUMBER() to generate required insights.
- Develop queries to fetch relevant data efficiently.

5. Success Metrics:

- Accurate revenue calculations for each store.
- Efficient identification of best-selling and low-stock products.
- Customer segmentation based on purchase behavior.
- Employee ranking based on performance.
- Timely reporting to aid business decisions.

6. Assumptions and Constraints:

- The database structure from Phase 1 remains unchanged.
- Data quality is maintained for meaningful analysis.
- Reports will be executed using SQL queries within the database environment.