

# Blinkit Sales Analysis – SQL Documentation with Code

Author: Satyaprakash Singh Yadav

## Project Overview

This document provides a complete SQL-based analysis of Blinkit sales data. It includes all SQL queries used in the analysis along with clear explanations to describe the business logic and analytical intent behind each query.

## 1. Data Exploration

Used to understand the structure and contents of the dataset.

```
SELECT *  
FROM blinkit_data;
```

## 2. Data Cleaning – Standardizing Fat Content

Fat content values were standardized to remove inconsistencies and ensure accurate aggregation during analysis.

```
UPDATE blinkit_data  
SET Item_Fat_Content =  
CASE  
    WHEN Item_Fat_Content IN ('LF', 'low fat') THEN 'Low Fat'  
    WHEN Item_Fat_Content = 'reg' THEN 'Regular'  
    ELSE Item_Fat_Content  
END;
```

## 3. KPI Calculations

### 3.1 Total Sales

```
SELECT  
    SUM(Total_Sales) AS Total_Sales  
FROM blinkit_data;
```

### 3.2 Average Sales

```
SELECT  
    AVG(Total_Sales) AS Average_Sales  
FROM blinkit_data;
```

### 3.3 Number of Items Sold

```
SELECT  
    COUNT(*) AS Number_Of_Items  
FROM blinkit_data;
```

### 3.4 Average Rating

```
SELECT  
    AVG(Rating) AS Average_Rating  
FROM blinkit_data;
```

## 4. Sales Analysis by Dimensions

### 4.1 Total Sales by Fat Content

```
SELECT  
    Item_Fat_Content,  
    SUM(Total_Sales) AS Total_Sales  
FROM blinkit_data  
GROUP BY Item_Fat_Content;
```

## 4.2 Total Sales by Item Type

```
SELECT
  Item_Type,
  SUM(Total_Sales) AS Total_Sales
FROM blinkit_data
GROUP BY Item_Type
ORDER BY Total_Sales DESC;
```

## 4.3 Sales by Outlet Location

```
SELECT
  Outlet_Location_Type,
  SUM(Total_Sales) AS Total_Sales
FROM blinkit_data
GROUP BY Outlet_Location_Type;
```

# 5. Advanced Analysis

Advanced SQL concepts such as window functions and pivot-style aggregations were used to calculate percentage contributions and comparative metrics across outlet dimensions.

This document is uniquely authored and includes complete SQL logic with explanations to demonstrate independent analytical work.