



**blinkit**

India's Last Minute App



# SQL Blinkit Analysis



# CREATE DATABASE blinkitdb;

```
2 CREATE DATABASE blinkitdb;
3
4 SELECT * FROM Blinkit_Data
5
6 SELECT COUNT(*) FROM Blinkit_Data
7
8 UPDATE Blinkit_Data
9 SET Item_Fat_Content =
10 CASE
11 WHEN Item_Fat_Content IN ('LF','low fat') THEN 'Low Fat'
12 WHEN Item_Fat_Content = 'reg' THEN 'Regular'
13 ELSE Item_Fat_Content
14 END
15
16 SELECT DISTINCT(Item_Fat_Content) FROM Blinkit_Data
17
18 -- BLINKIT ANALYSIS BUSINESS REQUIREMENT:
19
```

100 % No issues found Ln: 4 Ch: 1 SPC CRLF

|    | Item_Fat_Content | Item_Identifier | Item_Type             | Outlet_Establishment_Year | Outlet_Identifier | Outlet_Location_Type | Outlet_Size | Outlet_Type       | Item_Visibility     | Item_Weight      | Total_Sales      | Rating |
|----|------------------|-----------------|-----------------------|---------------------------|-------------------|----------------------|-------------|-------------------|---------------------|------------------|------------------|--------|
| 1  | Regular          | FDX32           | Fruits and Vegetables | 2012                      | OUT049            | Tier 1               | Medium      | Supermarket Type1 | 0.100013501942158   | 15.1000003814697 | 145.478607177734 | 5      |
| 2  | Low Fat          | NCB42           | Health and Hygiene    | 2022                      | OUT018            | Tier 3               | Medium      | Supermarket Type2 | 0.00859605055302382 | 11.8000001907349 | 115.349197387695 | 5      |
| 3  | Regular          | FDR28           | Frozen Foods          | 2016                      | OUT046            | Tier 1               | Small       | Supermarket Type1 | 0.0258964858949184  | 13.8500003814697 | 165.02099609375  | 5      |
| 4  | Regular          | FDL50           | Canned                | 2014                      | OUT013            | Tier 3               | High        | Supermarket Type1 | 0.0422778688371181  | 12.1499996185303 | 126.504600524902 | 5      |
| 5  | Low Fat          | DRI25           | Soft Drinks           | 2015                      | OUT045            | Tier 2               | Small       | Supermarket Type1 | 0.033970195800066   | 19.6000003814697 | 55.1613998413086 | 5      |
| 6  | Low Fat          | FDS52           | Frozen Foods          | 2020                      | OUT017            | Tier 2               | Small       | Supermarket Type1 | 0.00550548080354929 | 8.89000034332275 | 102.40160369873  | 5      |
| 7  | Low Fat          | NCU05           | Health and Hygiene    | 2011                      | OUT010            | Tier 3               | Small       | Grocery Store     | 0.0983124226331711  | 11.8000001907349 | 81.461799621582  | 5      |
| 8  | Low Fat          | NCD30           | Household             | 2015                      | OUT045            | Tier 2               | Small       | Supermarket Type1 | 0.0269037131220102  | 19.7000007629395 | 96.0726013183594 | 5      |
| 9  | Low Fat          | FDW20           | Fruits and Vegetables | 2014                      | OUT013            | Tier 3               | High        | Supermarket Type1 | 0.024129331111908   | 20.75            | 124.172996520996 | 5      |
| 10 | Low Fat          | FDX25           | Canned                | 2018                      | OUT027            | Tier 3               | Medium      | Supermarket Type3 | 0.101561568677425   | NULL             | 181.92919921875  | 5      |

Total no. of Rows in Blinkit\_Data.

```
5
6 SELECT COUNT(*) FROM Blinkit_Data
7
8 UPDATE Blinkit_Data
9 SET Item_Fat_Content =
10 CASE
11 WHEN Item_Fat_Content IN ('LF','low fat') THEN 'Low Fat'
12 WHEN Item_Fat_Content = 'reg' THEN 'Regular'
13 ELSE Item_Fat_Content
14 END
15
16 SELECT DISTINCT(Item_Fat_Content) FROM Blinkit_Data
17
18 -- BLINKIT ANALYSIS BUSINESS REQUIREMENT:
19
```

100 % No issues found

|   | (No column name) |
|---|------------------|
| 1 | 8523             |

# BLINKIT ANALYSIS BUSINESS REQUIREMENT:

To conduct a comprehensive analysis of Blinkit's Sales performance, customer satisfaction ,and inventory distribution to identify key insight and opportunities using various KPI's and visualizations in Power BI .

## KPI REQUIREMENTS :

**1 Total Sales :** The overall revenue generated from all items sold.

```
--1 Total Sales : The overall revenue generated from all items sold.
```

```
SELECT SUM(Total_Sales) AS Total_Sales  
FROM Blinkit_Data
```


```
SELECT CAST(SUM(Total_Sales)/ 1000000 AS DECIMAL(10,2)) AS Total_Sales_Millions  
FROM Blinkit_Data  
WHERE Outlet_Establishment_Year = 2022
```

| Results              |                  | Messages |
|----------------------|------------------|----------|
| Total_Sales          |                  |          |
| 1                    | 1201681.49196053 |          |
| Total_Sales_Millions |                  |          |
| 1                    | 0.13             |          |

**2 Average Sales :** The average revenue per sale.

```
--2 Average Sales : The average revenue per sale.
```

```
SELECT CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales  
FROM Blinkit_Data  
WHERE Outlet_Establishment_Year = 2022
```

100 %  No issues found

| Results | Messages |
|---------|----------|
|---------|----------|

|   | Avg_Sales |
|---|-----------|
| 1 | 141.7     |

3 Number of Items : The total count of different items sold

```
--3 Number of Items : The total count of different items sold
SELECT COUNT(*) AS No_Of_Items FROM Blinkit_Data
WHERE Outlet_Establishment_Year = 2022
```

| Results |             | Messages |
|---------|-------------|----------|
|         | No_Of_Items |          |
| 1       | 8523        |          |

4 Average Rating : The average customer rating for item sold.

```
--4 Average Rating : The average customer rating for item sold.
SELECT CAST(AVG(Rating) AS DECIMAL(10,2)) Avg_Rating FROM Blinkit_Data
--GRANULAR REQUIREMENTS
```

| Results |             | Messages |
|---------|-------------|----------|
|         | No_Of_Items |          |
| 1       | 928         |          |

| Results |            | Message |
|---------|------------|---------|
|         | Avg_Rating |         |
| 1       | 3.97       |         |

# GRANULAR REQUIREMENTS

## 1. Total Sales by Fat Content :

**Objective:** Analyze the impact of fat content on total sales.

**Additional KPI Metrics:** Assess how other KPIs (Average Sales, Number of items, Average Rating) vary with fat content.

```
--1 Total Sales by Fat Content :  
-- Objective: Analyze the impact of fat content on total sales.  
-- Additional KPI Metrics: Assess how other KPIs (Average Sales, Number of items, Average Rating) vary with fat content.  
SELECT Item_Fat_Content,  
       CAST(SUM(Total_Sales)/1000 AS DECIMAL(10,2)) AS Total_Sales_Thousands,  
       CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales,  
       COUNT(*) AS No_Of_Items,  
       CAST(AVG(Rating) AS DECIMAL(10,2)) Avg_Rating  
FROM Blinkit_Data  
GROUP BY Item_Fat_Content  
ORDER BY Total_Sales_Thousands DESC
```

| Results |                  | Messages              |           |             |            |
|---------|------------------|-----------------------|-----------|-------------|------------|
|         | Item_Fat_Content | Total_Sales_Thousands | Avg_Sales | No_Of_Items | Avg_Rating |
| 1       | Low Fat          | 776.32                | 140.7     | 5517        | 3.97       |
| 2       | Regular          | 425.36                | 141.5     | 3006        | 3.97       |

## 2. Total Sales by Item Type :

**Objective:** Identify the performance of different item types in terms of total sales.

**Additional KPI Metrics:** Assess how other KPIs (Average Sales, Number of items, Average Rating) vary with fat content.

```
--2 Total Sales by Item Type :  
-- Objective: Identify the performance of different item types in terms of total sales.  
-- Additional KPI Metrics: Assess how other KPIs (Average Sales, Number of items, Average Rating) vary with fat content.  
  
SELECT TOP 5 Item_Type,  
             CAST(SUM(Total_Sales) AS DECIMAL(10,2)) AS Total_Sales,  
             CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales,  
             COUNT(*) AS No_Of_Items,  
             CAST(AVG(Rating) AS DECIMAL(10,2)) Avg_Rating  
FROM Blinkit_Data  
GROUP BY Item_Type  
ORDER BY Total_Sales ASC
```

Results

Messages

|   | Item_Type     | Total_Sales | Avg_Sales | No_Of_Items | Avg_Rating |
|---|---------------|-------------|-----------|-------------|------------|
| 1 | Seafood       | 9077.87     | 141.8     | 64          | 3.96       |
| 2 | Breakfast     | 15596.70    | 141.8     | 110         | 3.93       |
| 3 | Starchy Foods | 21880.03    | 147.8     | 148         | 3.92       |
| 4 | Others        | 22451.89    | 132.9     | 169         | 3.95       |
| 5 | Hard Drinks   | 29334.68    | 137.1     | 214         | 3.91       |

### 3. Fat Content by Outlet for Total Sales :

**Objective:** Compare total sales across different outlet segmented by fat content.

**Additional KPI Metrics:** Assess how other KPIs (Average Sales, Number of items, Average Rating) vary with fat content.

```
--3 Fat Content by Outlet for Total Sales :  
-- Objective: Compare total sales across different outlet segmented by fat content.  
-- Additional KPI Metrics: Assess how other KPIs (Average Sales, Number of items, Average Rating) vary with fat content.  
  
SELECT Outlet_Location_Type, Item_Fat_Content,  
       CAST(SUM(Total_Sales) AS DECIMAL(10,2)) AS Total_Sales,  
       CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales,  
       COUNT(*) AS No_Of_Items,  
       CAST(AVG(Rating) AS DECIMAL(10,2)) AS Avg_Rating  
FROM Blinkit_Data  
GROUP BY Outlet_Location_Type, Item_Fat_Content  
ORDER BY Total_Sales ASC
```

Results Messages

|   | Outlet_Location_Type | Item_Fat_Content | Total_Sales | Avg_Sales | No_Of_Items | Avg_Rating |
|---|----------------------|------------------|-------------|-----------|-------------|------------|
| 1 | Tier 1               | Regular          | 121349.90   | 143.1     | 848         | 3.97       |
| 2 | Tier 2               | Regular          | 138685.87   | 142.1     | 976         | 3.95       |
| 3 | Tier 3               | Regular          | 165326.04   | 139.9     | 1182        | 3.97       |
| 4 | Tier 1               | Low Fat          | 215047.91   | 139.6     | 1540        | 3.98       |
| 5 | Tier 2               | Low Fat          | 254464.78   | 140.7     | 1809        | 3.97       |
| 6 | Tier 3               | Low Fat          | 306807.00   | 141.5     | 2168        | 3.96       |



#### 4. Total Sales by Outlet Establishment :

**Objective:** Evaluate how the age or type of outlet establishment influences total sales.

```
--4 Total Sales by Outlet Establishment :  
-- Objective: Evaluate how the age or type of outlet establishment influences total sales.  
  
SELECT Outlet_Establishment_Year,  
       CAST(SUM(Total_Sales) AS DECIMAL(10,2)) AS Total_Sales,  
       CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales,  
       COUNT(*) AS No_Of_Items,  
       CAST(AVG(Rating) AS DECIMAL(10,2)) Avg_Rating  
FROM Blinkit_Data  
GROUP BY Outlet_Establishment_Year  
ORDER BY Total_Sales DESC
```

| Results |                           | Messages    |           |             |            |  |
|---------|---------------------------|-------------|-----------|-------------|------------|--|
|         | Outlet_Establishment_Year | Total_Sales | Avg_Sales | No_Of_Items | Avg_Rating |  |
| 1       | 2018                      | 204522.26   | 139.8     | 1463        | 3.97       |  |
| 2       | 2017                      | 133103.91   | 143.1     | 930         | 3.94       |  |
| 3       | 2016                      | 132113.37   | 142.1     | 930         | 3.96       |  |
| 4       | 2014                      | 131809.02   | 141.4     | 932         | 3.95       |  |
| 5       | 2022                      | 131477.78   | 141.7     | 928         | 3.97       |  |
| 6       | 2015                      | 130942.78   | 141.0     | 929         | 3.96       |  |
| 7       | 2012                      | 130476.86   | 140.3     | 930         | 3.99       |  |
| 8       | 2020                      | 129103.96   | 139.4     | 926         | 3.98       |  |
| 9       | 2011                      | 78131.57    | 140.8     | 555         | 3.98       |  |

# CHART's REQUIREMENTS

5. Percentage of Sales by Outlet Size :  
Objective: Analyze the Correlation between outlet size and total sales.

```
--CHART's REQUIREMENTS

--5 Percentage of Sales by Outlet Size :
-- Objective: Analyze the Correlation between outlet size and total sales.

SELECT
    Outlet_Size,
    CAST(SUM(Total_Sales) AS DECIMAL(10,2)) AS Total_Sales,
    CAST((SUM(Total_Sales) * 100.0 / SUM(SUM(Total_Sales)) OVER())) AS DECIMAL (10,2)) AS Sales_Percentage
FROM Blinkit_Data
GROUP BY Outlet_Size
ORDER BY Total_Sales DESC;
```

| Results |             | Messages    |                  |
|---------|-------------|-------------|------------------|
|         | Outlet_Size | Total_Sales | Sales_Percentage |
| 1       | Medium      | 507895.74   | 42.27            |
| 2       | Small       | 444794.17   | 37.01            |
| 3       | High        | 248991.59   | 20.72            |

## 6. Sales by Outlet Location :

**Objective: Assess the geographic distribution of sales across different locations.**

```
--6 Sales by Outlet Location :  
-- Objective: Assess the geographic distribution of sales across different locations.  
  
SELECT Outlet_Location_Type,  
       CAST(SUM(Total_Sales) AS DECIMAL(10,2)) AS Total_Sales,  
       CAST((SUM(Total_Sales) * 100.0 / SUM(SUM(Total_Sales)) OVER())) AS DECIMAL (10,2)) AS Sales_Percentage,  
       CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales,  
       COUNT(*) AS No_Of_Items,  
       CAST(AVG(Rating) AS DECIMAL(10,2)) Avg_Rating  
FROM Blinkit_Data  
GROUP BY Outlet_Location_Type  
ORDER BY Total_Sales DESC
```

Results

Messages

|   | Outlet_Location_Type | Total_Sales | Sales_Percentage | Avg_Sales | No_Of_Items | Avg_Rating |
|---|----------------------|-------------|------------------|-----------|-------------|------------|
| 1 | Tier 3               | 472133.03   | 39.29            | 140.9     | 3350        | 3.96       |
| 2 | Tier 2               | 393150.65   | 32.72            | 141.2     | 2785        | 3.96       |
| 3 | Tier 1               | 336397.81   | 27.99            | 140.9     | 2388        | 3.98       |

## 7. All Metrics by Outlet Type:

**-Objective: Provide a comprehensive view of all key metrics(Total Sales, Average sales, No. of Items, Average Rating) broken down by different outlet types.**

```
--7 All Metrics by Outlet Type:
-- Objective: Provide a comprehensive view of all key metrics(Total Sales, Average sales, No. of Items, Average Rating)
-- broken down by different outlet types.

SELECT Outlet_Type,
       CAST(SUM(Total_Sales) AS DECIMAL(10,2)) AS Total_Sales,
       CAST((SUM(Total_Sales) * 100.0 / SUM(SUM(Total_Sales)) OVER())) AS DECIMAL (10,2)) AS Sales_Percentage,
       CAST(AVG(Total_Sales) AS DECIMAL(10,1)) AS Avg_Sales,
       COUNT(*) AS No_Of_Items,
       CAST(AVG(Rating) AS DECIMAL(10,2)) Avg_Rating
FROM Blinkit_Data
GROUP BY Outlet_Type
ORDER BY Total_Sales DESC
```

 Results  Messages

|   | Outlet_Type       | Total_Sales | Sales_Percentage | Avg_Sales | No_Of_Items | Avg_Rating |
|---|-------------------|-------------|------------------|-----------|-------------|------------|
| 1 | Supermarket Type1 | 787549.89   | 65.54            | 141.2     | 5577        | 3.96       |
| 2 | Grocery Store     | 151939.15   | 12.64            | 140.3     | 1083        | 3.99       |
| 3 | Supermarket Type2 | 131477.78   | 10.94            | 141.7     | 928         | 3.97       |
| 4 | Supermarket Type3 | 130714.67   | 10.88            | 139.8     | 935         | 3.95       |