

Blinkit Sales Analysis - SQL Queries Documentation

1. Creating the Database

This query initializes a new database named `BLINKIT_PROJECT`.

```
-- 1. Creating the data base
CREATE DATABASE BLINKIT_PROJECT;
```

2. Selecting the Database

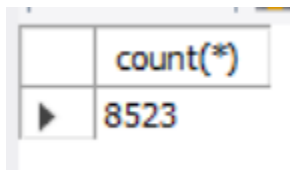
This statement sets the active database context to `BLINKIT_PROJECT`.

```
-- 2. Using the data from the database
USE BLINKIT_PROJECT;
```

3. Verifying Data Import

Counts the number of rows in the `blinkit` table to confirm successful data import.

```
-- 3. Checking wether all the rows and column are inported succesfully
select count(*) from blinkit;
```



count(*)
8523

4. Data Cleaning - Correcting Spelling Errors

Updates the `Item_Fat_Content` column to unify inconsistent entries like 'lf' and 'reg'.

```
-- 4. Data Cleaning
-- Changing the miss spelling and all in the column

UPDATE blinkit
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;
```

5. Checking Distinct Fat Content

Displays unique values in the `Item_Fat_Content` column after cleaning.

```
-- checking value change or not
select distinct(Item_Fat_Content) from blinkit;
```

	Item_Fat_Content
▶	Regular
	Low Fat

6. KPI: Total Sales

Calculates the total sales in millions for the dataset.

```
-- KPI Requirement
-- Total sales
select cast(sum(Total_Sales)/1000000 as decimal(10,2)) as
Total_sales_in_millions
from blinkit;
```

	Total_sales_in_millions
▶	1.20

7. KPI: Average Sales

Determines the average total sales across all entries.

```
-- Average sales
select cast(avg(Total_Sales) as decimal(10,0)) as avg_sales
from blinkit;
```

	avg_sales
▶	141

8. KPI: Number of Items

Counts the total number of records (items) in the dataset.

```
-- Number of iteam
select count(*) as num_iteam
from blinkit;
```

	num_iteam
▶	8523

9. KPI: Average Rating

Computes the average product rating.

```
-- Average Rating
select cast(avg(Rating) as decimal(10,2)) as avg_Rating
from blinkit;
```

	avg_Rating
▶	3.96

10. Analysis by Fat Content

Provides sales, item count, and average rating grouped by fat content.

```
-- Granular Requirement
-- Total sales or Additional matrix (avg sales,num of iteam,avg rating)
by fat content
select Item_Fat_Content,
cast(sum(Total_Sales)%1000 as decimal(10,2)) as Total_Sales,
cast(avg(Total_Sales) as decimal(10,1)) as Avg_Sales,
count(*) No_of_iteam,
cast(avg(Rating) as decimal(10,2)) as Avg_Rating
from blinkit
group by Item_Fat_Content
order by Total_Sales desc;
```

	Item_Fat_Content	Total_Sales	Avg_Sales	No_of_iteam	Avg_Rating
▶	Low Fat	776319.68	140.7	5517	3.96
	Regular	425361.80	141.5	3006	3.95

11. Analysis by Item Type

Summarizes metrics grouped by product type.

```
-- Total sales or Additional matrix (avg sales,num of iteam,avg rating)
by Item Type
select 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(*) No_of_iteam,
cast(avg(Rating) as decimal(10,2)) as Avg_Rating
from blinkit
group by Item_Type
order by Total_Sales desc;
```

	Item_Type	Total_Sales	Avg_Sales	No_of_iteam	Avg_Rating
►	Fruits and Vegetables	178124.08	144.6	1232	3.94
	Snack Foods	175433.92	146.2	1200	3.95
	Household	135976.53	149.4	910	4.00
	Frozen Foods	118558.88	138.5	856	3.96
	Dairy	101276.46	148.5	682	3.96
	Canned	90706.73	139.8	649	3.99
	Baking Goods	81894.74	126.4	648	3.98
	Health and Hygiene	68025.84	130.8	520	3.97
	Meat	59449.86	139.9	425	4.00
	Soft Drinks	58514.16	131.5	445	3.91
	Breads	35379.12	141.0	251	3.86
	Hard Drinks	29334.68	137.1	214	3.87
	Others	22451.89	132.9	169	3.97
	Starchy Foods	21880.03	147.8	148	3.92
	Breakfast	15596.70	141.8	110	3.93
	Seafood	9077.87	141.8	64	3.92

12. Analysis by Outlet Establishment Year

Gives insights grouped by the year the outlet was established.

```
-- Total sales or Additional matrix (avg sales,num of iteam,avg rating)
by Outlet_Establishment_Year
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(*) No_of_iteam,
cast(avg(Rating) as decimal(10,2)) as Avg_Rating
from blinkit
group by Outlet_Establishment_Year
order by Total_Sales desc;
```

	Outlet_Establishment_Year	Total_Sales	Avg_Sales	No_of_iteam	Avg_Rating
►	1998	204522.26	139.8	1463	3.96
	2017	133103.91	143.1	930	3.94
	2010	132113.37	142.1	930	3.95
	2000	131809.02	141.4	932	3.94
	2022	131477.77	141.7	928	3.95
	2015	130942.78	141.0	929	3.96
	2012	130476.86	140.3	930	3.97
	2020	129103.96	139.4	926	3.97
	2011	78131.56	140.8	555	3.97

13. Fat Content by Outlet Location

Breaks down sales metrics by both fat content and outlet location type.

```
-- Fat content by outlet by total Total sales or Additional matrix (avg
sales,num of iteam,avg rating)
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(*) No_of_iteam,
cast(avg(Rating) as decimal(10,2)) as Avg_Rating
from blinkit
group by Item_Fat_Content, Outlet_Location_Type
order by Total_Sales desc;
```

	Outlet_Location_Type	Item_Fat_Content	Total_Sales	Avg_Sales	No_of_iteam	Avg_Rating
►	Tier 3	Low Fat	306806.99	141.5	2168	3.95
	Tier 2	Low Fat	254464.77	140.7	1809	3.96
	Tier 1	Low Fat	215047.91	139.6	1540	3.97
	Tier 3	Regular	165326.03	139.9	1182	3.95
	Tier 2	Regular	138685.87	142.1	976	3.95
	Tier 1	Regular	121349.90	143.1	848	3.95

14. Sales Percentage by Outlet Size

Shows the percentage share of total sales by outlet size.

```
-- Other Business Requirement
-- Percentage of sales by Outlet size
select Outlet_Size,
cast(sum(Total_Sales) as decimal(10,2)) as Total_Sales_1,
cast((sum(Total_Sales) * 100 / sum(sum(Total_Sales)) over()) as
decimal(10,2) ) as Sales_percentage
```

```
from blinkit
group by Outlet_Size
order by Sales_percentage desc;
```

	Outlet_Size	Total_Sales_1	Sales_percentage
▶	Medium	507895.73	42.27
	Small	444794.17	37.01
	High	248991.58	20.72

15. Outlet Location Summary

Displays sales and rating metrics grouped by outlet location type.

```
-- Total Sales and Additional information by outlet location
select Outlet_Location_Type,
cast(sum(Total_Sales) as decimal(10,2)) as Total_Sales,
cast(avg(Total_Sales) as decimal(10,1)) as Avg_Sales,
count(*) No_of_iteam,
cast(avg(Rating) as decimal(10,2)) as Avg_Rating
from blinkit
group by Outlet_Location_Type
order by Total_sales desc;
```

	Outlet_Location_Type	Total_Sales	Avg_Sales	No_of_iteam	Avg_Rating
▶	Tier 3	472133.03	140.9	3350	3.95
	Tier 2	393150.64	141.2	2785	3.96
	Tier 1	336397.81	140.9	2388	3.96

16. Outlet Type Analysis

Summarizes all major metrics and sales percentage by outlet type.

```
-- All the matrix by outlet Type
select Outlet_Type,
cast(sum(Total_Sales) as decimal(10,2)) as Total_Sales,
cast((sum(Total_Sales) * 100 / sum(sum(Total_Sales)) over()) as
decimal(10,2) ) as Sales_percentage,
cast(avg(Total_Sales) as decimal(10,1)) as Avg_Sales,
count(*) No_of_iteam,
cast(avg(Rating) as decimal(10,2)) as Avg_Rating
from blinkit
group by Outlet_Type
order by Total_sales desc;
```

	Outlet_Type	Total_Sales	Sales_percentage	Avg_Sales	No_of_iteam	Avg_Rating
►	Supermarket Type1	787549.89	65.54	141.2	5577	3.95
	Grocery Store	151939.15	12.64	140.3	1083	3.98
	Supermarket Type2	131477.77	10.94	141.7	928	3.95
	Supermarket Type3	130714.67	10.88	139.8	935	3.95