SQL QUERIES WITH OUTPUT

BUSINESS REQUIREMENTS: To conduct a comprehensive analysis of Blinkit's sales performance, customer satisfaction, and inventory distribution to identify key insights and opportunities for optimization using various KPIs and visualisation in Power BI.

KPI REQUIREMENTS:

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

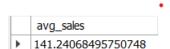**QUERY:** select sum(sales) as total_sales from blinkit_data;

OUTPUT:

total_sales
997159.2358000028

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

QUERY: select avg(sales) as avg_sales from blinkit_data;
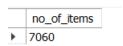
OUTPUT:

avg_sales
141.24068495750748

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

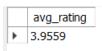**QUERY:** select count('Item Identifier') as no_of_items from blinkit_data;

OUTPUT:

no_of_items
7060

-- 4. Average Rating: The average customer rating for items sold.

QUERY: select avg(Rating) as avg_rating from blinkit_data;

OUTPUT:

avg_rating
3.9559

CHARTS 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.
Chart Type: Donut Chart(used in Power BI).

QUERY: select `Item Fat Content`,sum(sales) as total_sales from blinkit_data

group by `Item Fat Content`

order by total_sales;

OUTPUT:

Item Fat Content	total_sales
▶ Regular	352642.4937999999
Low Fat	644516.7419999995

-- 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.
Chart Type: Bar Chart(used in Power BI).

QUERY: select `item type`, sum(sales) as total_sales from blinkit_data

group by `item type`;

OUTPUT:

item type	total_sales
▶ Fruits and Vegetables	147188.9632
Health and Hygiene	56383.802000000025
Frozen Foods	99961.88179999996
Canned	75052.99999999996
Soft Drinks	49294.67379999997
Household	113210.14200000005
Breads	28663.184800000003
Hard Drinks	25261.621400000004
Dairy	84526.49679999994
Breakfast	12696.1874
Snack Foods	144949.13000000006
Meat	47159.90099999999
Others	18624.596999999998
Baking Goods	67588.11300000007
Seafood	7397.564399999999
Starchy Foods	19199.97719999999

-- 3. Fat content by outlet for total sales

Objective: Compare total sales across different outlets segmented by fat content.
Additional KPI Metrics: Assess how other KPIs (Average Sales, Number of Items, Average Rating) vary with fat content.
Chart Type: Stacked Column Chart(used in Power BI).

QUERY: select `outlet identifier`, `item fat content`, sum(sales) as total_sales from blinkit_data

group by `outlet identifier`, `item fat content`;

OUTPUT:

outlet identifier	item fat content	total_sales
OUT049	Regular	48060.80380000007
OUT018	Low Fat	84844.60899999995
OUT046	Regular	47510.04859999998
OUT013	Regular	45406.87080000001
OUT045	Low Fat	85034.81220000004
OUT017	Low Fat	82947.0497999999
OUT010	Low Fat	51785.83160000003
OUT013	Low Fat	86402.14480000007
OUT035	Low Fat	86482.91739999998
OUT035	Regular	46620.989600000015
OUT049	Low Fat	82416.056
OUT017	Regular	46156.91060000002
OUT046	Low Fat	84603.3212
OUT045	Regular	45907.96800000002
OUT010	Regular	26345.735000000004
OUT018	Regular	46633.16740000002

-- 4. Total sales by outlet establishment

Objective: Evaluate how the age or type of outlet establishment influences total sales.
Chart Type: Line Chart(used in Power BI).

QUERY: select `outlet establishment year`, sum(sales) as total_sales from blinkit_data

group by `outlet establishment year`;

OUTPUT:

outlet establishment year	total_sales
2012	130476.85979999998
2022	131477.77639999994
2016	132113.36980000007
2014	131809.01560000007
2015	130942.7802
2020	129103.96039999987
2011	78131.56659999998
2017	133103.9069999999

-- 5. Sales by outlet size

Objective: Analyze the correlation between outlet size and total sales.
Chart Type: Donut / Pie Chart(used in Power BI).

QUERY: select `outlet size`, sum(sales) as total_sales from blinkit_data

group by `outlet size`;

OUTPUT:

outlet size	total_sales
Medium	377181.06179999985
Small	370986.5879999998
High	248991.58600000024

-- 6. Sales by outlet location

Objective: Assess the geographic distribution of sales across different locations.
Chart Type: Funnel Map(used in Power BI).

QUERY: select `outlet location type`, sum(sales) as total_sales from blinkit_data

group by `outlet location type`;

OUTPUT:

outlet location type	total_sales
Tier 1	262590.2295999998
Tier 3	341418.35860000044
Tier 2	393150.64759999956

-- 7. All metrics by outlet type

Objective: Provide a comprehensive view of all key metrics (Total Sales, Average Sales, Number of Items, Average Rating) broken down by different outlet types.
Chart Type: Matrix Card(used in Power BI).

QUERY: select `outlet location type`, count(`item identifier`) as total_items, sum(sales) as total_sales, avg(sales) as avg_sales,

avg(rating) as avg_rating, avg(`item weight`) as avg_item_weight, avg(`item visibility`) as avg_item_visibility from blinkit_data

group by `outlet location type`

order by total_sales;

OUTPUT:

outlet location type	total_items	total_sales	avg_sales	avg_rating	avg_item_weight	avg_item_visibility
Tier 1	1860	262590.2295999998	141.1775427956988	3.9608	12.892123655913945	0.06063499119946228
Tier 3	2415	341418.35860000044	141.37406153209128	3.9516	12.933745341614797	0.0699006818240165
Tier 2	2785	393150.64759999956	141.16719842010755	3.9566	12.768628366247599	0.061037827982405736