

# Blinkit Data Analysis

## BUSINESS REQUIREMENT

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.

### *KPI's Requirements*

1. **Total Sales:** The overall revenue generated from all items sold.
2. **Average Sales:** The average revenue per sale.
3. **Number of Items:** The total count of different items sold.
4. **Average Rating:** The average customer rating for items sold.

```
select * from blinkit_data
select count(*) from blinkit_data
```

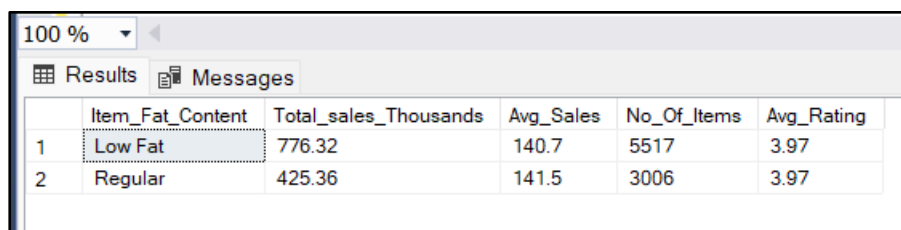
## Data Cleaning

```
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
select distinct(item_fat_content) from blinkit_data
```

### Q.1 TOTAL SALES BY FAT CONTENT

ANS:

```
select 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 Item_Fat_Content
order by Total_Sales desc;
```

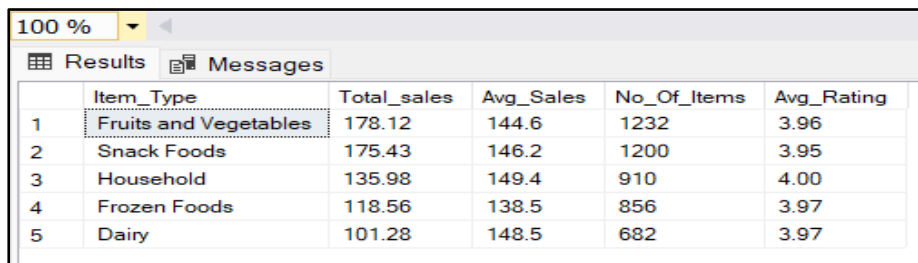


	Item_Fat_Content	Total_sales_Thousands	Avg_Sales	No_Of_Items	Avg_Rating
1	Low Fat	776.32	140.7	5517	3.97
2	Regular	425.36	141.5	3006	3.97

## Q.2 TOTAL SALES BY ITEM TYPE

ANS:

```
select Top 5 Item_Type,
       cast(sum(Total_Sales)/1000 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 Item_Type
order by Total_sales desc;
```

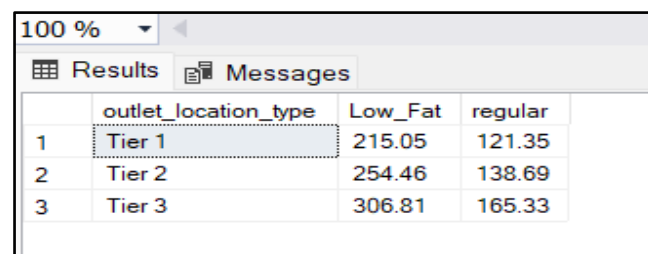


	Item_Type	Total_sales	Avg_Sales	No_Of_Items	Avg_Rating
1	Fruits and Vegetables	178.12	144.6	1232	3.96
2	Snack Foods	175.43	146.2	1200	3.95
3	Household	135.98	149.4	910	4.00
4	Frozen Foods	118.56	138.5	856	3.97
5	Dairy	101.28	148.5	682	3.97

## Q.3 FAT CONTENT BY OUTLET FOR TOTAL SALES

Ans:

```
select outlet_location_type,
       isnull([Low Fat],0) as Low_Fat,
       isnull([Regular],0) as regular
from
(
    select Outlet_Location_Type ,Item_fat_content,
           cast(sum(Total_Sales)/1000 as decimal(10,2)) as Total_sales
    from blinkit_data
    group by Outlet_Location_Type,Item_Fat_Content
) as SourceTable
PIVOT
(
    sum(total_sales)
    for item_fat_content in ([Low Fat],[Regular])
) as PivotTable
Order by outlet_location_type;
```



	outlet_location_type	Low_Fat	regular
1	Tier 1	215.05	121.35
2	Tier 2	254.46	138.69
3	Tier 3	306.81	165.33

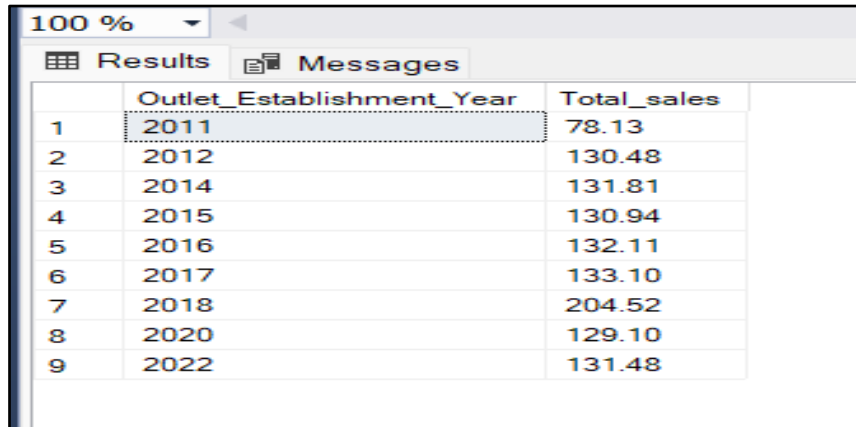
## Q.4 TOTAL SALES BY OUTLET ESTABLISHMENT

Ans:

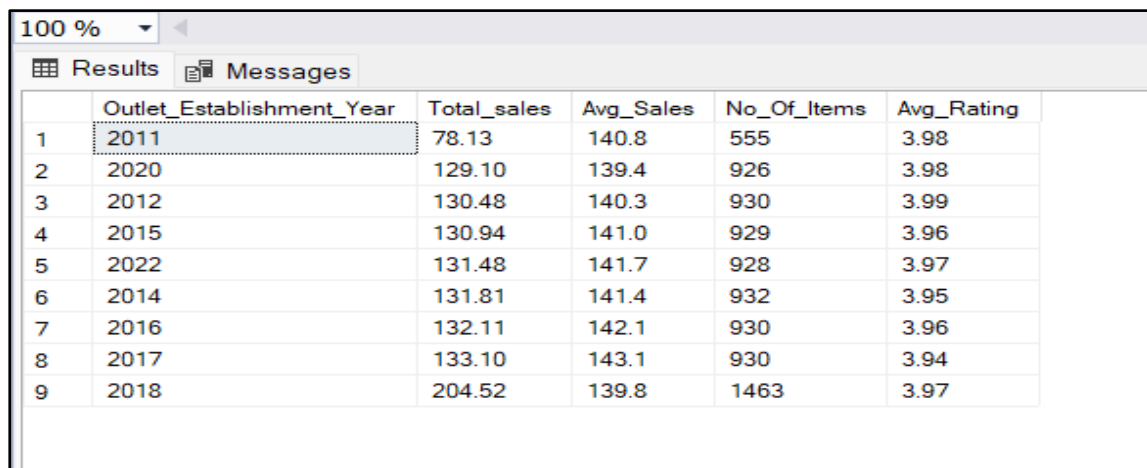
```

Ans= select Outlet_Establishment_Year,
           cast(sum(Total_Sales)/1000 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_Establishment_Year
order by Total_sales asc;

```



	Outlet_Establishment_Year	Total_sales
1	2011	78.13
2	2012	130.48
3	2014	131.81
4	2015	130.94
5	2016	132.11
6	2017	133.10
7	2018	204.52
8	2020	129.10
9	2022	131.48



	Outlet_Establishment_Year	Total_sales	Avg_Sales	No_Of_Items	Avg_Rating
1	2011	78.13	140.8	555	3.98
2	2020	129.10	139.4	926	3.98
3	2012	130.48	140.3	930	3.99
4	2015	130.94	141.0	929	3.96
5	2022	131.48	141.7	928	3.97
6	2014	131.81	141.4	932	3.95
7	2016	132.11	142.1	930	3.96
8	2017	133.10	143.1	930	3.94
9	2018	204.52	139.8	1463	3.97

## Q.5 SALES BY OUTLET SIZE

**Ans:**

```

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;

```

100 %			
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

## Q.6 SALES BY OUTLET LOCATION

Ans:

```
select Outlet_Location_Type,
       cast(sum(Total_Sales)/1000 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)) as Avg_Rating
from blinkit_data
group by Outlet_Location_Type
order by Total_sales DESC;
```

100 %						
Results		Messages				
	Outlet_Location_Type	Total_sales	Sales_Percentage	Avg_Sales	No_Of_Items	Avg_Rating
1	Tier 3	472.13	39.29	140.9	3350	3.96
2	Tier 2	393.15	32.72	141.2	2785	3.96
3	Tier 1	336.40	27.99	140.9	2388	3.98

## Q.7 ALL METRICS BY OUTLET TYPE

Ans:

```
select Outlet_Type,
       cast(sum(Total_Sales)/1000 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)) as Avg_Rating
from blinkit_data
group by Outlet_Type
order by Total_sales DESC;
```

100 %						
Results		Messages				
	Outlet_Type	Total_sales	Sales_Percentage	Avg_Sales	No_Of_Items	Avg_Rating
1	Supermarket Type1	787.55	65.54	141.2	5577	3.96
2	Grocery Store	151.94	12.64	140.3	1083	3.99
3	Supermarket Type2	131.48	10.94	141.7	928	3.97
4	Supermarket Type3	130.71	10.88	139.8	935	3.95