

# zepto

## INVENTORY ANALYSIS

# Project Overview

- **Objective:**

To derive key insights from Zepto's product-level inventory data for better stocking, pricing, and sales decisions.

- **Tools Used:**

Excel, SQL

- **Dataset Includes:**

Product name, category, MRP, discount %, available quantity, selling price, weight, stock status

```
CREATE DATABASE ZEPTO_ANALYSIS;
```

```
USE ZEPTO_ANALYSIS;
```

```
SELECT * FROM ZEPTO;
```

-- Distinct categories of products

```
SELECT DISTINCT Category  
FROM ZEPTO;
```

	Category
►	Fruits & Vegetables
	Cooking Essentials
	Munchies
	Dairy, Bread & Batter
	Beverages
	Packaged Food
	Ice Cream & Desserts
	Chocolates & Candies
	Meats, Fish & Eggs
	Biscuits
	Personal Care
	Paan Corner
	Home & Cleaning
	Health & Hygiene

-- Products with price (High to Low)

```
SELECT *  
FROM ZEPTO  
ORDER BY mrp DESC;
```

	Category	name	mrp	discountPercent	availableQuantity	discountedSellingPrice	weightInGms	outOfStock	quantity	sku_id
►	Cooking Essentials	Borges Extra Light Olive Oil Bottle	2600	46	6	1399	2000	FALSE	2	318
	Munchies	Borges Extra Light Olive Oil Bottle	2600	46	6	1399	2000	FALSE	2	1058
	Personal Care	Pampers Pants - Large	1549	45	3	849	82	FALSE	82	2813
	Paan Corner	Pampers Pants - Large	1549	45	3	849	82	FALSE	82	3379
	Munchies	Praakritik Natural Desi Gir Cow A2 Ghee	1450	10	6	1305	540	FALSE	540	1043
	Cooking Essentials	Praakritik Natural Desi Gir Cow A2 Ghee	1450	10	6	1305	540	FALSE	540	756
	Munchies	Dhara Kachi Ghani Mustard Oil Jar	1250	8	6	1143	5000	FALSE	5	812
	Cooking Essentials	Dhara Kachi Ghani Mustard Oil Jar	1250	8	6	1143	5000	FALSE	5	198
	Cooking Essentials	Saffola Gold (Jar)	1240	0	6	1240	5000	FALSE	5	291
	Munchies	Saffola Gold (Jar)	1240	0	6	1240	5000	FALSE	5	446
	Cooking Essentials	Dhara Health Refined Sun Flower Oil Jar	1200	18	6	984	5000	FALSE	5	189
	Munchies	Dhara Health Refined Sun Flower Oil Jar	1200	18	6	984	5000	FALSE	5	796
	Personal Care	Pampers Premium Care Pants - Large	1099	18	2	899	44	FALSE	44	2679
	Personal Care	Pampers Premium Care Pants - Medium	1099	18	6	899	54	FALSE	54	2751
	Personal Care	Pampers Active Baby Diapers New Bor...	1099	22	3	849	72	FALSE	72	2828
	Paan Corner	Pampers Premium Care Pants - Medium	1099	18	6	899	54	FALSE	54	3292
	Paan Corner	Pampers Active Baby Diapers New Bor...	1099	22	3	849	72	FALSE	72	3390
	Paan Corner	Pampers Premium Care Pants - Large	1099	18	2	899	44	FALSE	44	3404
	Cooking Essentials	Dhara Filtered Groundnut Oil (Jar)	1050	1	6	1035	5000	FALSE	5	14
	Cooking Essentials	Dhara Filtered Groundnut Oil (Jar)	1050	1	6	1035	5000	FALSE	5	302

-- Products with discountPercent (High to Low)

SELECT Category, mrp, availableQuantity,  
discountPercent, discountedSellingPrice, quantity  
FROM ZEPTO  
ORDER BY discountPercent DESC;

	Category	mrp	availableQuantity	discountPercent	discountedSellingPrice	quantity
►	Biscuits	45	2	51	22	75
	Biscuits	45	5	51	22	75
	Biscuits	45	4	51	22	75
	Ice Cream & Desserts	160	0	50	80	500
	Beverages	355	6	50	177	200
	Cooking Essentials	160	6	50	80	500
	Cooking Essentials	220	5	50	110	200
	Packaged Food	280	5	50	140	175
	Dairy, Bread & Batter	295	0	50	147	200
	Munchies	220	5	50	110	200
	Biscuits	150	0	50	75	250
	Biscuits	150	3	50	75	250
	Munchies	220	6	50	110	200
	Packaged Food	160	6	50	80	500
	Meats, Fish & Eggs	220	6	50	110	200
	Chocolates & Candies	280	6	50	140	175

## -- Average Price of Products

```
SELECT AVG(mrp)
```

FROM ZEPTO;

	AVG(mrp)
▶	156.9740

-- Products with no discount

SELECT \*

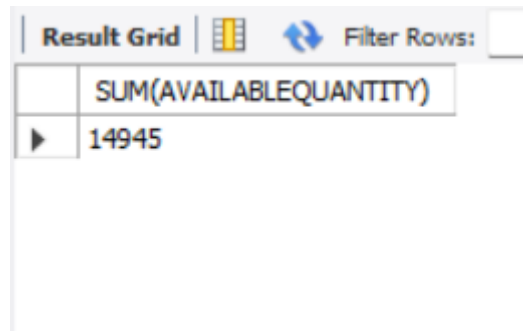
## FROM ZEPTO

WHERE DISCOUNTPERCENT IS NULL;

[illegible]

-- Sum of available quantity of products

```
SELECT SUM(AVAILABLEQUANTITY)
FROM ZEPTO;
```



The screenshot shows a 'Result Grid' window with a toolbar containing a grid icon, a refresh icon, and a 'Filter Rows:' input field. The grid itself has two columns: the first column is empty, and the second column is labeled 'SUM(AVAILABLEQUANTITY)'. There is one data row with a value of '14945' in the second column. A small arrow icon is visible in the first column of the data row.

	SUM(AVAILABLEQUANTITY)
▶	14945

-- Products that are not Out of Stock

```
SELECT CATEGORY, MRP, DISCOUNTPERCENT,
AVAILABLEQUANTITY, DISCOUNTEDSELLINGPRICE,
OUTOFSTOCK
FROM ZEPTO
WHERE OUTOFSTOCK = 'FALSE';
```



	CATEGORY	MRP	DISCOUNTPERCENT	AVAILABLEQUANTITY	DISCOUNTEDSELLINGPRICE	OUTOFSTOCK
►	Fruits & Vegetables	25	16	3	21	FALSE
	Fruits & Vegetables	42	16	3	35	FALSE
	Fruits & Vegetables	51	15	3	43	FALSE
	Fruits & Vegetables	20	15	3	17	FALSE
	Fruits & Vegetables	14	14	3	12	FALSE
	Fruits & Vegetables	35	17	3	29	FALSE
	Fruits & Vegetables	75	16	3	63	FALSE
	Fruits & Vegetables	58	15	3	49	FALSE
	Fruits & Vegetables	23	17	3	19	FALSE
	Fruits & Vegetables	19	15	3	16	FALSE
	Fruits & Vegetables	29	17	3	24	FALSE
	Fruits & Vegetables	11	18	3	9	FALSE
	Cooking Essentials	120	6	5	112	FALSE
	Cooking Essentials	1050	1	6	1035	FALSE
	Fruits & Vegetables	26	15	3	22	FALSE
	Fruits & Vegetables	14	14	3	12	FALSE
	Cooking Essentials	160	6	4	150	FALSE
	Fruits & Vegetables	19	15	3	16	FALSE
	Cooking Essentials	140	15	6	118	FALSE
	Fruits & Vegetables	42	16	3	35	FALSE
	Cooking Essentials	95	6	4	89	FALSE
	Cooking Essentials	50	6	6	47	FALSE
	Cooking Essentials	99	5	6	94	FALSE
	Cooking Essentials	330	10	1	297	FALSE
	Fruits & Vegetables	25	16	3	21	FALSE

-- Count of all In Stock Products

SELECT COUNT(OUTOFSTOCK)

FROM ZEPTO

WHERE OUTOFSTOCK = 'FALSE';

Result Grid			Filter Rows:	
	COUNT(OUTOFSTOCK)			
►	3274			

-- Adding sku column

```
ALTER TABLE zepto_analysis.ZEPTO  
ADD sku_id SERIAL PRIMARY KEY;
```

-- Products In Stock vs Out of Stock

```
Select outOfStock, Count(sku_id)  
From ZEPTO  
GROUP BY outOfStock;
```

Result Grid			Filter Rows:
	outOfStock	Count(sku_id)	
▶	FALSE	3274	
	TRUE	453	



-- Product name present multiple times

Select name, COUNT(sku\_id) as "Number of SKUs"

From ZEPTO

GROUP BY Name

HAVING count(sku\_id) >1

ORDER BY COUNT(sku\_id) DESC;

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	name	Number of SKUs			
▶	Arden Eggs White	10			
	Saffola Veggie Twist Masala Oats	10			
	Quaker Oats	10			
	Mother's Recipe Tamarind Paste	10			
	Sunfeast Yippee! Pasta Treat - Sour Cream Onion	10			
	Sunfeast YiPPee! Magic Masala Noodles	10			
	Amul Delicious Fat Spread - Cholesterol Free	10			
	Kellogg's Real Almond & Honey Corn Flakes	9			
	Amul Fresh Cream	8			
	iD Idli & Dosa Batter	7			
	Everest Tandoori Chicken Masala	6			
	Everest Kitchen King Masala	6			
	Maggi Magic Cubes Extra Chicken	6			
	Everest Chicken Masala	6			
	Godrej Yummiez Chicken Nuggets	6			
	Everest Garam Masala	6			
	Yummiez Chicken Garlic Fingers Pouch	6			
	Zorabian Chicken Smoked Ham	6			
	Zorabian Chicken Kheema Parathas	6			
	Godrej Yummiez Chicken Breakfast Salami	6			
	Godrej Yummiez Chilli Chicken Sausages	6			

# Data Cleaning

```
SELECT *
```

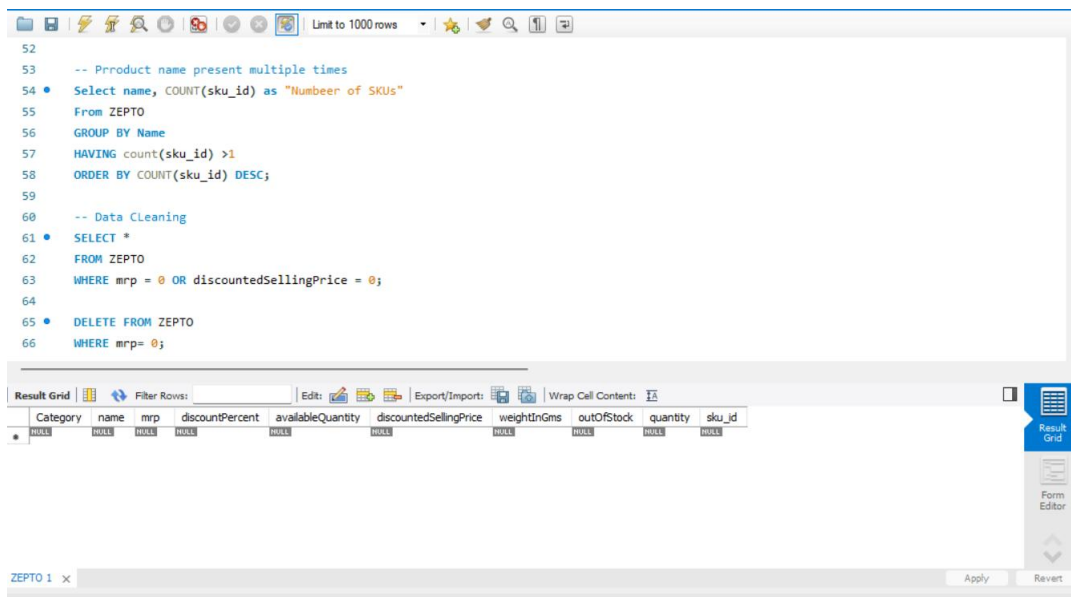
```
FROM ZEPTO
```

```
WHERE mrp = 0 OR discountedSellingPrice = 0;
```

	Category	name	mrp	discountPercent	availableQuantity	discountedSellingPrice	weightInGms	outOfStock	quantity	sku_id
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

```
DELETE FROM ZEPTO
```

```
WHERE mrp= 0;
```

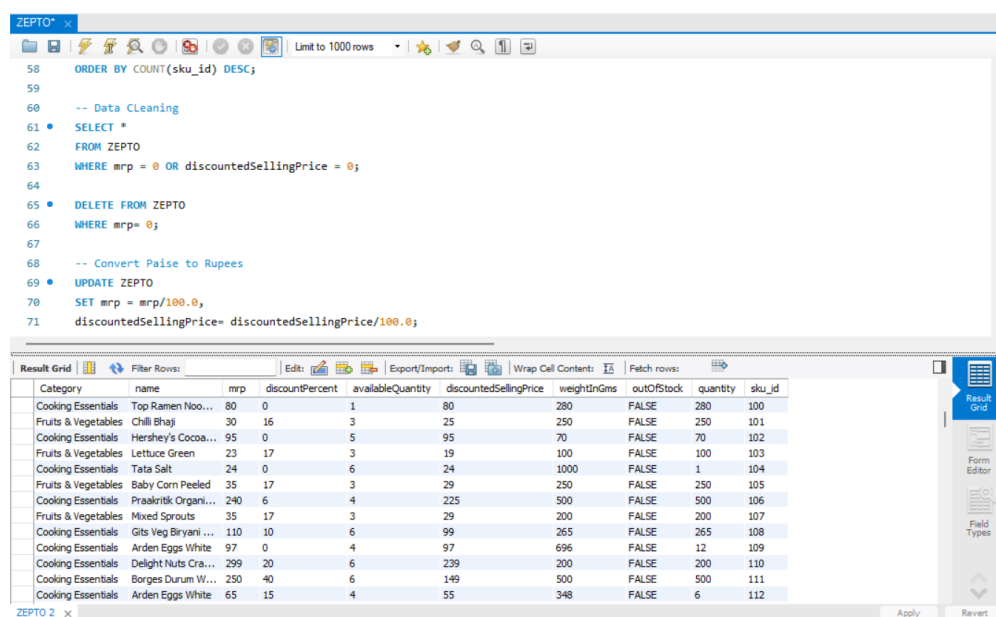


-- Convert Paise to Rupees

UPDATE ZEPTO

SET mrp = mrp/100.0,

discountedSellingPrice= discountedSellingPrice/100.0;



# SOLVING SOME BUSINESS RELATED QUESTIONS

-- Q1. Top 10 best value products

SELECT DISTINCT name, mrp, discountPercent,  
discountedSellingPrice

FROM ZEPTO

ORDER BY discountPercent DESC

LIMIT 10;

The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, execution, and a 'Limit to 1000 rows' dropdown. The SQL editor contains the following code:

```
65 • DELETE FROM ZEPTO
66 WHERE mrp= 0;
67
68 -- Convert Paise to Rupees
69 • UPDATE ZEPTO
70 SET mrp = mrp/100.0,
71 discountedSellingPrice= discountedSellingPrice/100.0;
72
73 -- SOLVING SOME BUSINESS RELATED QUESTIONS.
74 -- Q1. Top 10 best value products
75 • SELECT DISTINCT name, mrp, discountPercent
76 FROM ZEPTO
77 ORDER BY discountPercent DESC
78 LIMIT 10;
```

Below the editor is the 'Result Grid' section, which includes a 'Filter Rows' input, 'Export' button, 'Wrap Cell Content' checkbox, and 'Fetch rows' button. The results are displayed in a table with 3 columns: name, mrp, and discountPercent.

name	mrp	discountPercent
Dukes Waffy Chocolate Wafers	45	51
Dukes Waffy Orange Wafers	45	51
Dukes Waffy Strawberry Wafers	45	51
Ceres Foods Fish Mustard Instant Liquid Masala	220	50
Ceres Foods Laal Maas Instant Liquid Masala	220	50
Ceres Foods Nalli Nihari Instant Liquid Masala	220	50
Chef's Basket Durum Wheat Elbow Pasta	160	50
Chef's Basket Durum Wheat Fusilli Pasta	160	50
Chef's Basket Durum Wheat Penne Pasta	160	50
Dukes Waffy Chocolate Wafer Rolls	150	50

On the right side of the IDE, there is a vertical toolbar with buttons for 'Result Grid', 'Form Editor', and 'Field Types'. The bottom status bar shows 'ZEPTO 3' and 'Read Only'.

-- Q2. What are the Products with High MRP but Out of Stock

SELECT DISTINCT name, mrp

FROM ZEPTO

WHERE outOfStock = TRUE and mrp > 300

ORDER BY mrp DESC;

The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, execution, and a 'Limit to 1000 rows' dropdown. The query editor contains the following SQL code:

```
72
73 -- SOLVING SOME BUSINESS RELATED QUESTIONS.
74 -- Q1. Top 10 best value products
75 • SELECT DISTINCT name, mrp, discountPercent, discountedSellingPrice
76 FROM ZEPTO
77 ORDER BY discountPercent DESC
78 LIMIT 10;
79
80 -- Q2. What are the Products with High MRP but Out of Stock
81 • SELECT DISTINCT name, mrp
82 FROM ZEPTO
83 WHERE outOfStock = TRUE and mrp > 300
84 ORDER BY mrp DESC;
85
```

Below the query editor is a 'Result Grid' section with a 'Filter Rows' input and an 'Export' button. A small table is visible with columns 'name' and 'mrp'. On the right side, there is a vertical toolbar with buttons for 'Result Grid', 'Form Editor', and 'Field Types'. The bottom status bar shows 'ZEPTO 7' and a 'Read Only' indicator.

-- Q3. Calculate Estimated Revenue for each Category

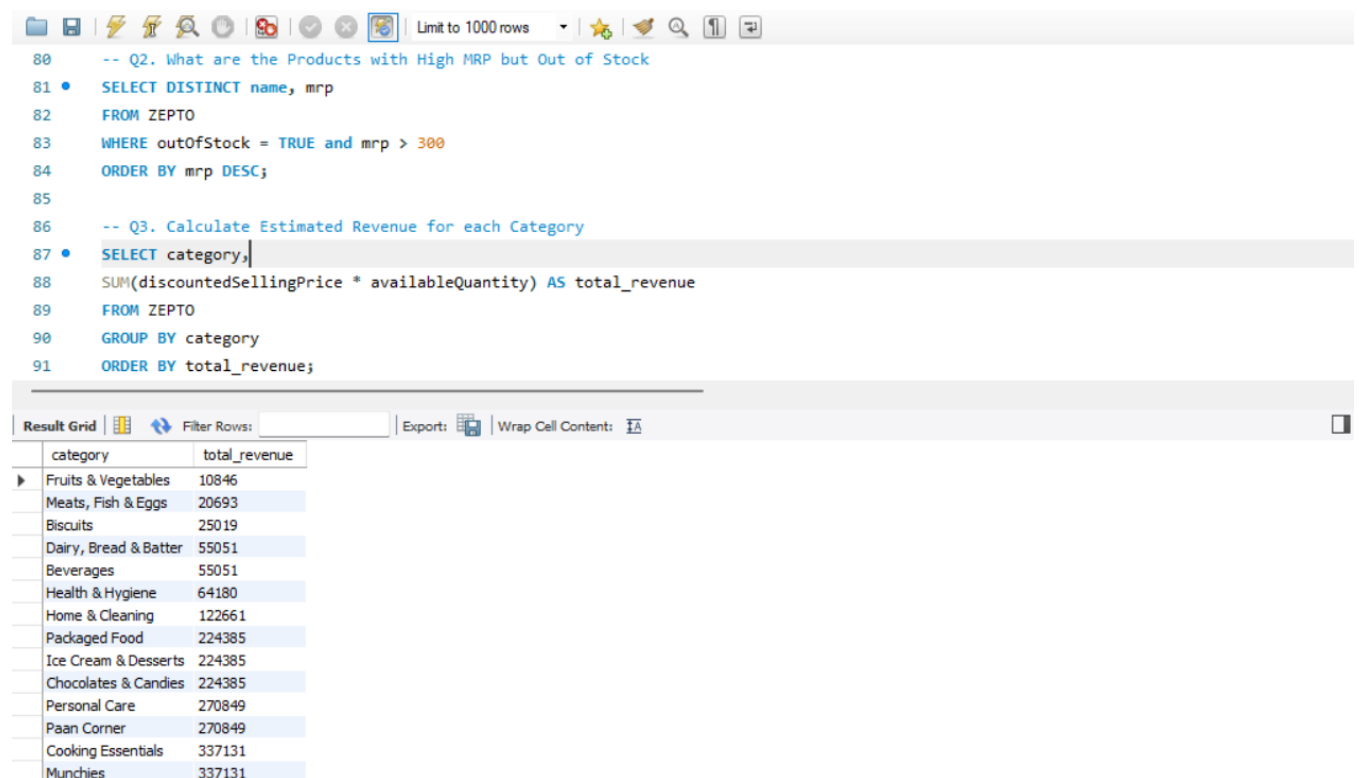
SELECT category,

SUM(discountedSellingPrice \* availableQuantity) AS  
total\_revenue

FROM ZEPTO

GROUP BY category

ORDER BY total\_revenue;



The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, search, and execution, along with a 'Limit to 1000 rows' dropdown. The SQL editor contains two queries. The first query (Q2) is commented out. The second query (Q3) is active and calculates the estimated revenue for each category. Below the editor, the 'Result Grid' shows the output of the Q3 query, with columns 'category' and 'total\_revenue'. The results are sorted by total revenue in descending order.

```
80 -- Q2. What are the Products with High MRP but Out of Stock
81 • SELECT DISTINCT name, mrp
82 FROM ZEPTO
83 WHERE outOfStock = TRUE and mrp > 300
84 ORDER BY mrp DESC;
85
86 -- Q3. Calculate Estimated Revenue for each Category
87 • SELECT category,
88 SUM(discountedSellingPrice * availableQuantity) AS total_revenue
89 FROM ZEPTO
90 GROUP BY category
91 ORDER BY total_revenue;
```

category	total_revenue
Fruits & Vegetables	10846
Meats, Fish & Eggs	20693
Biscuits	25019
Dairy, Bread & Batter	55051
Beverages	55051
Health & Hygiene	64180
Home & Cleaning	122661
Packaged Food	224385
Ice Cream & Desserts	224385
Chocolates & Candies	224385
Personal Care	270849
Paan Corner	270849
Cooking Essentials	337131
Munchies	337131

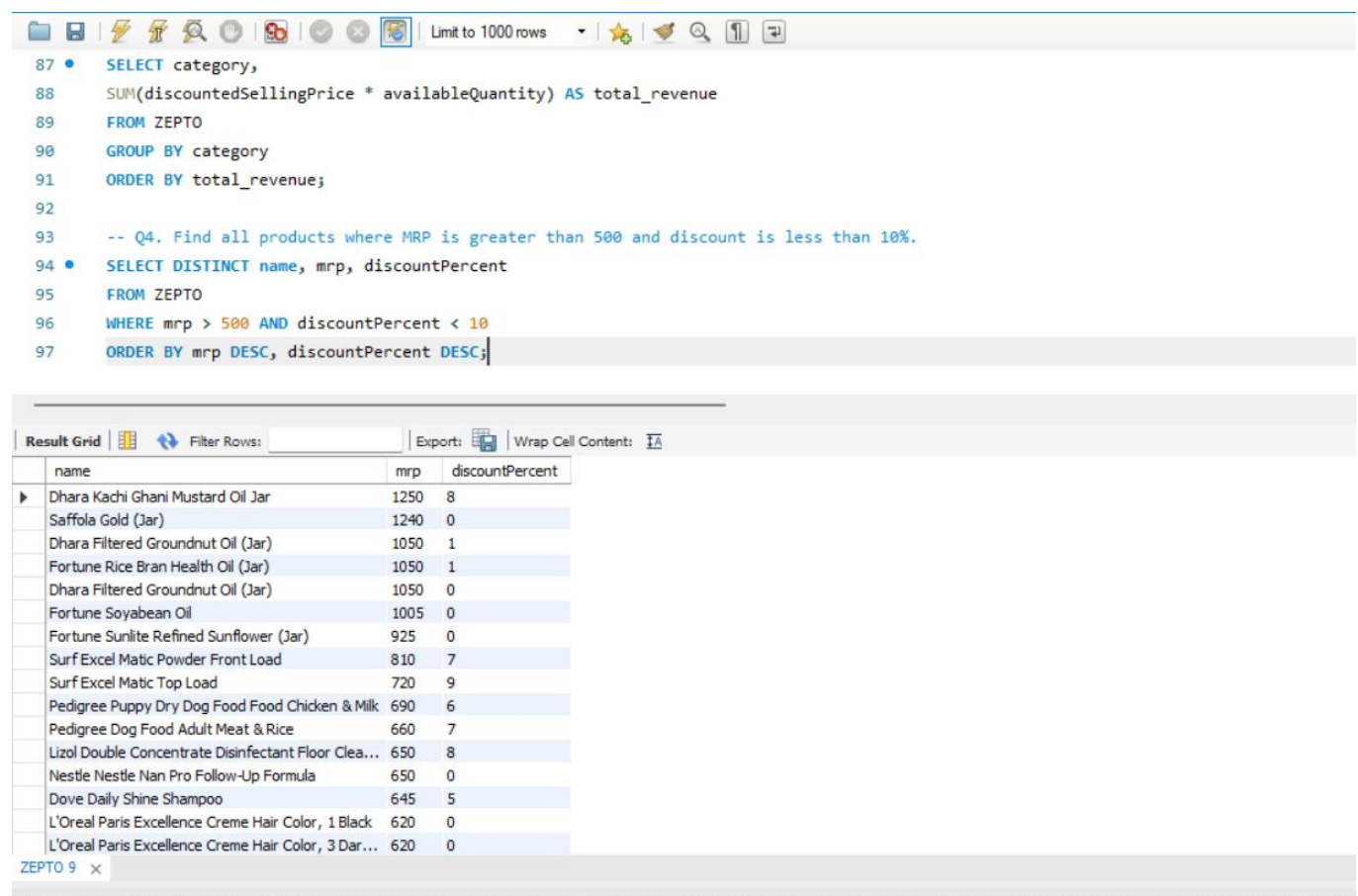
-- Q4. Find all products where MRP is greater than 500 and discount is less than 10%.

SELECT DISTINCT name, mrp, discountPercent

FROM ZEPTO

WHERE mrp > 500 AND discountPercent < 10

ORDER BY mrp DESC, discountPercent DESC;



The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, a 'Limit to 1000 rows' dropdown, and search/execution icons. The SQL editor contains the following code:

```
87 • SELECT category,  
88     SUM(discountedSellingPrice * availableQuantity) AS total_revenue  
89     FROM ZEPTO  
90     GROUP BY category  
91     ORDER BY total_revenue;  
92  
93     -- Q4. Find all products where MRP is greater than 500 and discount is less than 10%.  
94 • SELECT DISTINCT name, mrp, discountPercent  
95     FROM ZEPTO  
96     WHERE mrp > 500 AND discountPercent < 10  
97     ORDER BY mrp DESC, discountPercent DESC;
```

Below the editor, the 'Result Grid' tab is active, displaying the results of the second query. The grid has columns for 'name', 'mrp', and 'discountPercent'. The results are sorted by MRP in descending order.

name	mrp	discountPercent
Dhara Kachi Ghani Mustard Oil Jar	1250	8
Saffola Gold (Jar)	1240	0
Dhara Filtered Groundnut Oil (Jar)	1050	1
Fortune Rice Bran Health Oil (Jar)	1050	1
Dhara Filtered Groundnut Oil (Jar)	1050	0
Fortune Soyabean Oil	1005	0
Fortune Sunlite Refined Sunflower (Jar)	925	0
Surf Excel Matic Powder Front Load	810	7
Surf Excel Matic Top Load	720	9
Pedigree Puppy Dry Dog Food Food Chicken & Milk	690	6
Pedigree Dog Food Adult Meat & Rice	660	7
Lizol Double Concentrate Disinfectant Floor Clea...	650	8
Nestle Nestle Nan Pro Follow-Up Formula	650	0
Dove Daily Shine Shampoo	645	5
L'Oreal Paris Excellence Creme Hair Color, 1 Black	620	0
L'Oreal Paris Excellence Creme Hair Color, 3 Dar...	620	0

At the bottom, a tab labeled 'ZEPTO 9' is visible.

-- Q5. Identify the top 5 categories offering the highest average discount percent.

SELECT category,

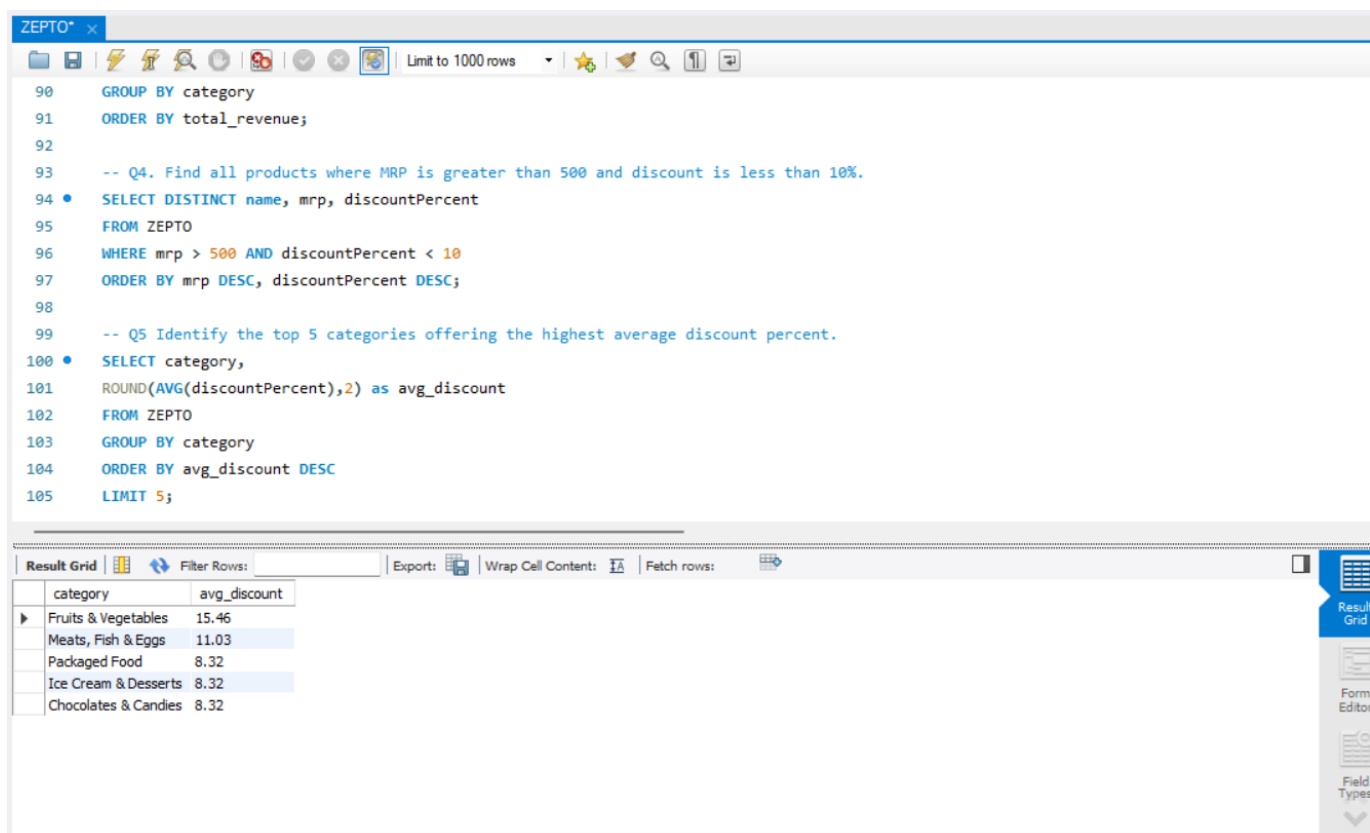
ROUND(AVG(discountPercent),2) as avg\_discount

FROM ZEPTO

GROUP BY category

ORDER BY avg\_discount DESC

LIMIT 5;



The screenshot shows a SQL IDE window titled 'ZEPTO\*'. The query editor contains the following SQL code:

```
90 GROUP BY category
91 ORDER BY total_revenue;
92
93 -- Q4. Find all products where MRP is greater than 500 and discount is less than 10%.
94 • SELECT DISTINCT name, mrp, discountPercent
95 FROM ZEPTO
96 WHERE mrp > 500 AND discountPercent < 10
97 ORDER BY mrp DESC, discountPercent DESC;
98
99 -- Q5 Identify the top 5 categories offering the highest average discount percent.
100 • SELECT category,
101 ROUND(AVG(discountPercent),2) as avg_discount
102 FROM ZEPTO
103 GROUP BY category
104 ORDER BY avg_discount DESC
105 LIMIT 5;
```

The results pane at the bottom shows a table with two columns: 'category' and 'avg\_discount'. The data is as follows:

category	avg_discount
Fruits & Vegetables	15.46
Meats, Fish & Eggs	11.03
Packaged Food	8.32
Ice Cream & Desserts	8.32
Chocolates & Candies	8.32



-- Q6. Find the price per gram for products above 100g and sort by best value.

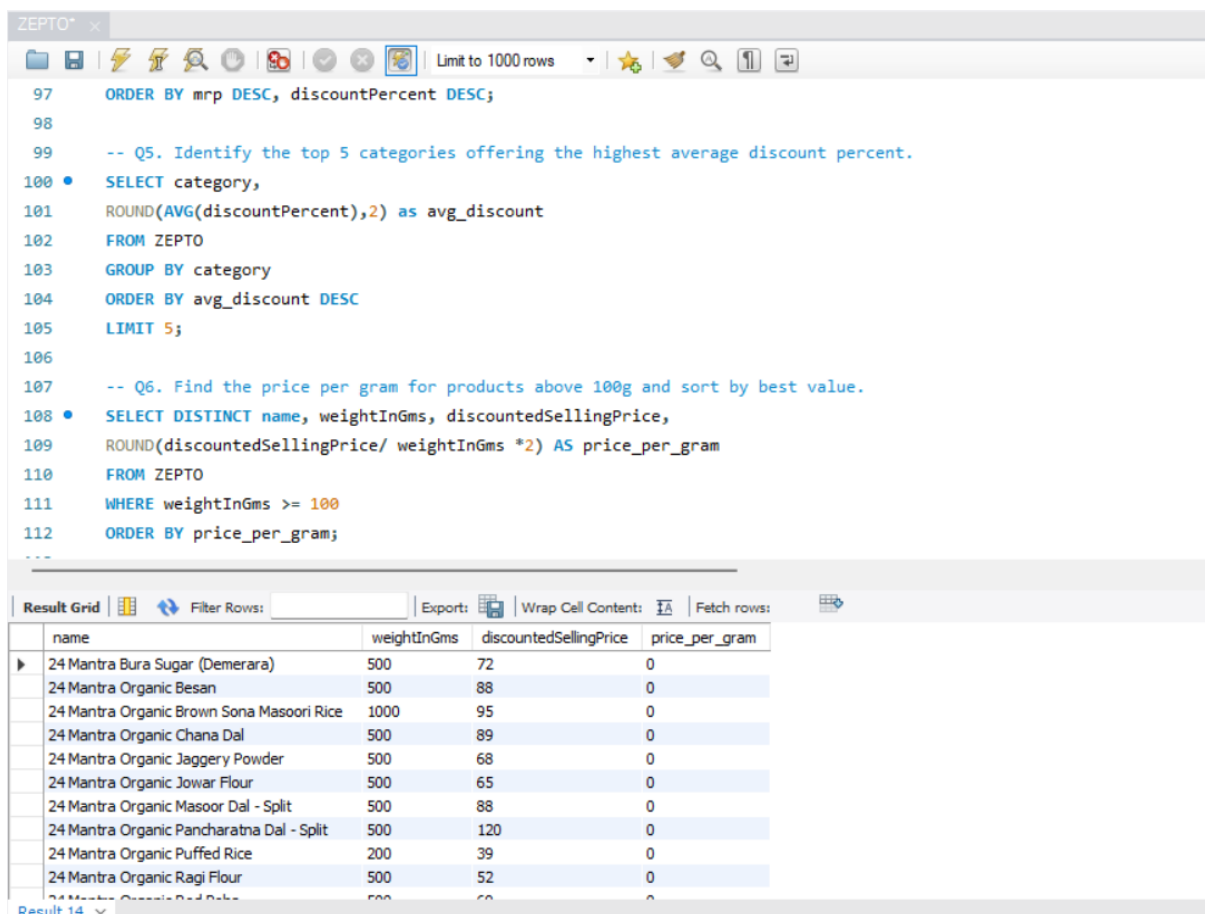
SELECT DISTINCT name, weightInGms,  
discountedSellingPrice,

ROUND(discountedSellingPrice/ weightInGms \*2) AS  
price\_per\_gram

FROM ZEPTO

WHERE weightInGms >= 100

ORDER BY price\_per\_gram;



The screenshot shows a SQL IDE window titled 'ZEPTO'. The query editor contains the following SQL code:

```
97 ORDER BY mrp DESC, discountPercent DESC;
98
99 -- Q5. Identify the top 5 categories offering the highest average discount percent.
100 • SELECT category,
101 ROUND(AVG(discountPercent),2) as avg_discount
102 FROM ZEPTO
103 GROUP BY category
104 ORDER BY avg_discount DESC
105 LIMIT 5;
106
107 -- Q6. Find the price per gram for products above 100g and sort by best value.
108 • SELECT DISTINCT name, weightInGms, discountedSellingPrice,
109 ROUND(discountedSellingPrice/ weightInGms *2) AS price_per_gram
110 FROM ZEPTO
111 WHERE weightInGms >= 100
112 ORDER BY price_per_gram;
```

The results pane at the bottom shows a table with 4 columns: name, weightInGms, discountedSellingPrice, and price\_per\_gram. The table contains 14 rows of data, with the first row highlighted.

name	weightInGms	discountedSellingPrice	price_per_gram
24 Mantra Bura Sugar (Demerara)	500	72	0
24 Mantra Organic Besan	500	88	0
24 Mantra Organic Brown Sona Masoori Rice	1000	95	0
24 Mantra Organic Chana Dal	500	89	0
24 Mantra Organic Jaggery Powder	500	68	0
24 Mantra Organic Jowar Flour	500	65	0
24 Mantra Organic Masoor Dal - Split	500	88	0
24 Mantra Organic Pancharatna Dal - Split	500	120	0
24 Mantra Organic Puffed Rice	200	39	0
24 Mantra Organic Ragi Flour	500	52	0
24 Mantra Organic Red Lentils	500	72	0
24 Mantra Organic Rice	1000	95	0
24 Mantra Organic Rice	1000	95	0
24 Mantra Organic Rice	1000	95	0

-- Q7. Group the products into categories like low, medium, bulk

SELECT DISTINCT name, weightInGms,

CASE WHEN weightInGms < 1000 THEN 'Low'

WHEN weightInGms < 5000 THEN 'Medium'

ELSE 'Bulk'

END AS Weight\_Category

FROM ZEPTO;

The screenshot shows a SQL IDE window titled 'ZEPTO\*'. The query editor contains the following SQL code:

```
109 ROUND(discountedSellingPrice/ weightInGms *2) AS price_per_gram
110 FROM ZEPTO
111 WHERE weightInGms >= 100
112 ORDER BY price_per_gram;
113
114 -- Q7. Group the products into categories like low, medium, bulk
115 SELECT DISTINCT name, weightInGms,
116 CASE WHEN weightInGms < 1000 THEN 'Low'
117 WHEN weightInGms < 5000 THEN 'Medium'
118 ELSE 'Bulk'
119 END AS Weight_Category
120 FROM ZEPTO;
121
```

The results grid below the query shows the following data:

name	weightInGms	Weight_Category
Onion	1000	Medium
Tomato Hybrid	1000	Medium
Tender Coconut	58	Low
Coriander Leaves	100	Low
Ladies Finger	250	Low
Potato	1000	Medium
Lemon	200	Low
Watermelon	58	Low
Capsicum Green	250	Low
Chilli Green	100	Low
Banana Robusta	348	Low
Garlic Indian	100	Low
Praakritik Organi...	500	Low
Dhara Filtered G...	5000	Bulk
Carli...	58	Low

-- Q8. What is the Total Inventory Weight Per Category

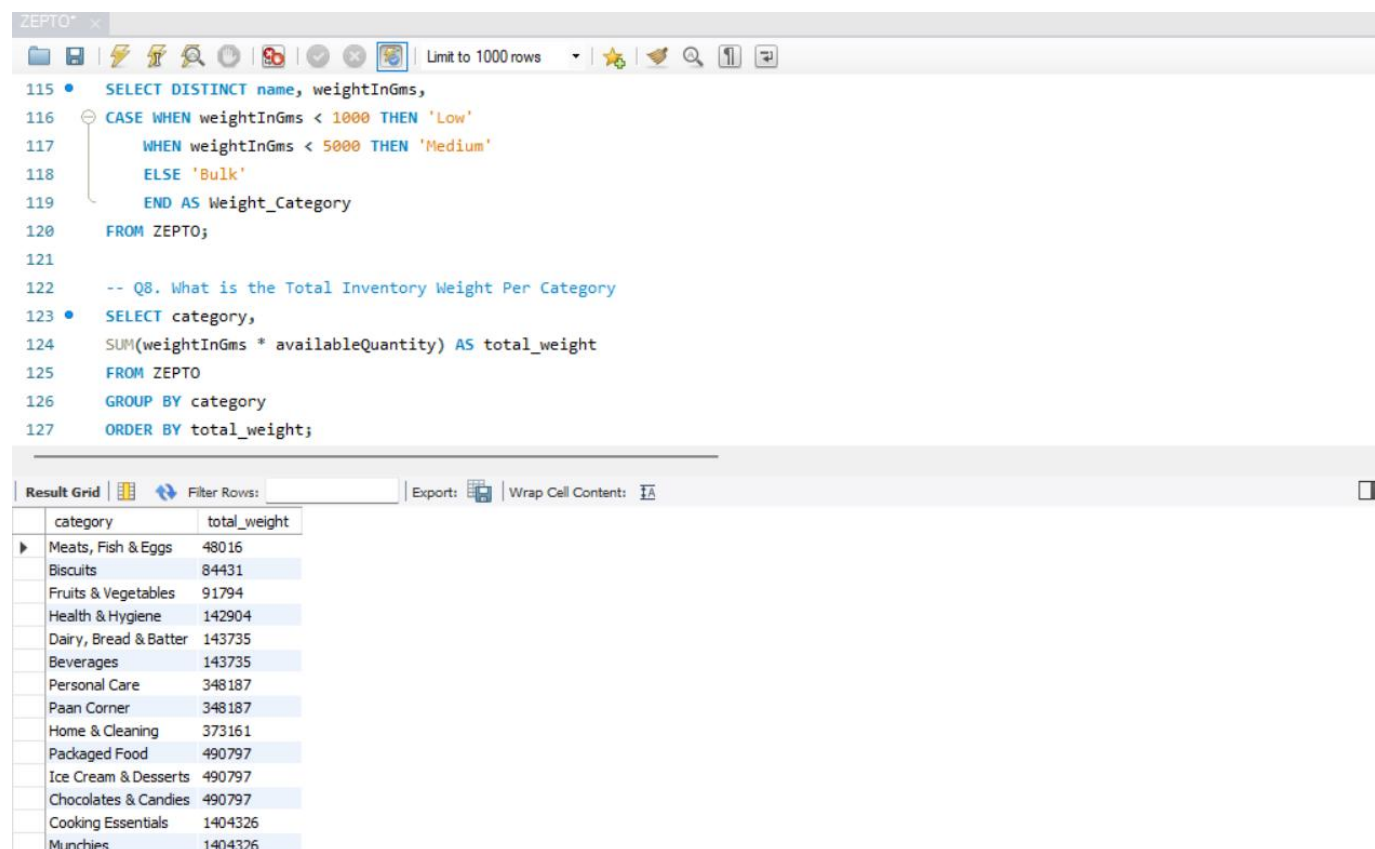
SELECT category,

SUM(weightInGms \* availableQuantity) AS  
total\_weight

FROM ZEPTO

GROUP BY category

ORDER BY total\_weight;



The screenshot shows a SQL IDE window titled 'ZEPTO'. The query editor contains the following SQL code:

```
115 • SELECT DISTINCT name, weightInGms,  
116 CASE WHEN weightInGms < 1000 THEN 'Low'  
117 WHEN weightInGms < 5000 THEN 'Medium'  
118 ELSE 'Bulk'  
119 END AS Weight_Category  
120 FROM ZEPTO;  
121  
122 -- Q8. What is the Total Inventory Weight Per Category  
123 • SELECT category,  
124 SUM(weightInGms * availableQuantity) AS total_weight  
125 FROM ZEPTO  
126 GROUP BY category  
127 ORDER BY total_weight;
```

Below the query editor, the 'Result Grid' tab is active, displaying the results of the second query. The table has two columns: 'category' and 'total\_weight'. The results are sorted by 'total\_weight' in descending order.

category	total_weight
Meats, Fish & Eggs	48016
Biscuits	84431
Fruits & Vegetables	91794
Health & Hygiene	142904
Dairy, Bread & Batter	143735
Beverages	143735
Personal Care	348187
Paan Corner	348187
Home & Cleaning	373161
Packaged Food	490797
Ice Cream & Desserts	490797
Chocolates & Candies	490797
Cooking Essentials	1404326
Munchies	1404326