

# **ZEPTO-INVENTORY MANAGEMENT SYSTEM**

## **SQL PROJECT**

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# INTRODUCTION

This project focuses on analyzing Zepto inventory data using SQL to generate meaningful business insights related to sales performance and stock management.

The dataset contains product-level details such as category, product name, MRP, discount percentage, selling price, available quantity, stock status, and units sold. The objective of this analysis is to evaluate revenue performance, identify top-selling products, rank products within each category, detect high-stock but low-sales items, and determine the overall revenue contribution of products and categories. Advanced SQL concepts including aggregations, subqueries and window functions were applied to transform raw inventory data into actionable insights that can support better business decisions and inventory optimization.

# RETRIEVE ALL PRODUCTS IN THE "FRUITS & VEGETABLES" CATEGORY.

```
SELECT
```

```
    name
```

```
FROM      zepto
```

```
WHERE
```

```
    category = 'Fruits & Vegetables';
```

Result Grid | Filter Row

	name
▶	Onion
▶	Tomato Hybrid
▶	Tender Coconut
▶	Coriander Leaves
▶	Ladies Finger

# DISPLAY PRODUCT NAMES AND THEIR SELLING PRICES.

SELECT

```
name AS Product_name,  
discountedSellingPrice AS Selling_price
```

FROM

```
zepto;
```

	Product_name	Selling_price
▶	Onion	21
	Tomato Hybrid	35
	Tender Coconut	43
	Coriander Leaves	17
	Ladies Finger	12

zepto 2 ×

# SHOW PRODUCTS WITH AVAILABLE\_QUANTITY LESS THAN 5.

- SELECT

```
    name, availableQuantity
```

```
FROM
```

```
zepto
```

```
WHERE
```

```
availableQuantity < 5;
```

Result Grid | Filter Rows:

	name	availableQuantity
▶	Onion	3
▶	Tomato Hybrid	3
▶	Tender Coconut	3
▶	Coriander Leaves	3
▶	Ladies Finger	3

# FIND TOTAL REVENUE GENERATED BY EACH CATEGORY.

- **SELECT**

```
category,  
SUM(discountedSellingPrice * quantity) AS Total_revenue  
FROM  
zepto  
GROUP BY category  
ORDER BY Total_revenue ASC;
```

	category	Total_revenue
▶	Fruits & Vegetables	440997
	Health & Hygiene	1496117
	Biscuits	1792601
	Dairy, Bread & Batter	3330483
	Beverages	3330483

# FIND CATEGORIES WHERE AVERAGE DISCOUNT IS MORE THAN 10%.

- ```
SELECT Category,
       AVG(discountPercent) AS avg_discount
  FROM zepto
 GROUP BY Category
 HAVING AVG(discountPercent) > 10;
```

|   | Category            | avg_discount |
|---|---------------------|--------------|
| ▶ | Fruits & Vegetables | 15.4624      |
|   | Meats, Fish & Eggs  | 11.0317      |

# CLASSIFY PRODUCTS AS:HIGH DISCOUNT (>20%)MEDIUM DISCOUNT (10-20%)LOW DISCOUNT (<10%)

SELECT

name,

dicountPercent,

CASE

WHEN dicountPercent > 20 THEN 'High Discount'

WHEN dicountPercent BETWEEN 10 AND 20 THEN 'Medium Discount'

ELSE 'Low Discount'

END AS discount\_category

FROM zepto;

|   | name             | dicountPercent | discount_category |
|---|------------------|----------------|-------------------|
| ▶ | Onion            | 16             | Medium Discount   |
|   | Tomato Hybrid    | 16             | Medium Discount   |
|   | Tender Coconut   | 15             | Medium Discount   |
|   | Coriander Leaves | 15             | Medium Discount   |
|   | Ladies Finger    | 14             | Medium Discount   |

# CALCULATE PRICE PER GRAM FOR EACH PRODUCT.

```
SELECT  
    sku_id,  
    name,  
    weightInGms,  
    ROUND( discountedSellingPrice * 1.0 / weightInGms, 2) AS price_per_gram  
FROM zepto;
```

|   | sku_id | name             | weightInGm | price_per_gram |
|---|--------|------------------|------------|----------------|
| ▶ | 1      | Onion            | 1000       | 0.02           |
|   | 2      | Tomato Hybrid    | 1000       | 0.04           |
|   | 3      | Tender Coconut   | 58         | 0.74           |
|   | 4      | Coriander Leaves | 100        | 0.17           |
|   | 5      | Ladies Finger    | 250        | 0.05           |

# FIND PRODUCTS WHOSE SELLING PRICE IS ABOVE THE AVERAGE SELLING PRICE.

- `SELECT`

```
    sku_id,  
    name,  
    discountedSellingPrice
```

```
FROM zepto
```

```
WHERE discountedSellingPrice > (  
    SELECT AVG( discountedSellingPrice )  
    FROM zepto  
) ;
```

|   | sku_id | name                | discountedSellingPrice |
|---|--------|---------------------|------------------------|
| ▶ | 44     | Apple Washington    | 149                    |
|   | 47     | Apple Royal Gala    | 159                    |
|   | 78     | Avocado Indian ...  | 149                    |
|   | 82     | Maggi Magic Cu...   | 179                    |
|   | 83     | Dhara Filtered G... | 1050                   |

# RANK PRODUCTS BASED ON REVENUE WITHIN EACH CATEGORY.

- SELECT

```
Category,  
name,  
SUM(discountedsellingprice * Quantity) AS total_revenue,  
RANK() OVER (  
    PARTITION BY Category  
    ORDER BY SUM(discountedsellingprice *Quantity) DESC  
) AS revenue_rank  
FROM zepto  
GROUP BY Category, name;
```

| Category  | name                | total_revenue | revenue_rank |
|-----------|---------------------|---------------|--------------|
| Beverages | Amul Cheese Sli...  | 276250        | 1            |
| Beverages | Amul Butter - Pa... | 124900        | 2            |
| Beverages | Amul Cheese - B...  | 120000        | 3            |
| Beverages | Amul Unsalted C...  | 119000        | 4            |
| Beverages | Amul Safed Mak...   | 116000        | 5            |

# FIND TOP 3 PRODUCTS FROM EACH CATEGORY USING ROW\_NUMBER().

```
SELECT *
FROM (
    SELECT
        Category,
        name,
        SUM(discountedsellingprice * Quantity) AS total_revenue,
        ROW_NUMBER() OVER (
            PARTITION BY Category
            ORDER BY SUM(discountedsellingprice * Quantity) DESC
        ) AS row_num
    FROM zepto
    GROUP BY Category, name
) ranked
WHERE row_num <= 3;
```

| Category             | name                | total_revenue | row |
|----------------------|---------------------|---------------|-----|
| Beverages            | Amul Cheese Sli...  | 276250        | 1   |
| Beverages            | Amul Butter - Pa... | 124900        | 2   |
| Beverages            | Amul Cheese - B...  | 120000        | 3   |
| Biscuits             | Danish Butter C...  | 140000        | 1   |
| Biscuits             | Britannia Toaste... | 86270         | 2   |
| Biscuits             | Karachi Bakery ...  | 79600         | 3   |
| Chocolates & Candies | Whiskas Kitten (... | 381700        | 1   |
| Chocolates & Candies | Baorrvs Fruit an... | 374250        | 2   |

# FIND TOP 3 PRODUCTS FROM EACH CATEGORY USING ROW\_NUMBER().

- **SELECT**

```
Category,  
SUM(discountedsellingprice * Quantity) AS total_revenue  
FROM zepto  
GROUP BY Category  
ORDER BY total_revenue DESC  
LIMIT 1;
```

Result Grid | Filter Rows:

|   | Category      | total_revenue |
|---|---------------|---------------|
| ▶ | Packaged Food | 17349917      |

**THANK YOU**