

-- NULL values

```
SELECT *  
FROM zepto  
WHERE Category IS NULL OR name IS NULL OR mrp IS NULL OR discountPercent IS NULL  
OR availableQuantity IS NULL OR discountedSellingPrice IS NULL OR weightInGms IS NULL  
OR outOfStock IS NULL OR quantity IS NULL;
```

Category	name	mrp	discountPercent	availableQuantity	discountedSellingPrice	weightInGms	outOfStock	quantity
----------	------	-----	-----------------	-------------------	------------------------	-------------	------------	----------

--different product categories

```
SELECT DISTINCT category  
FROM zepto  
ORDER BY category;
```

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

-- products in stocks vs out of stock

```
SELECT outOfStock, COUNT(*) AS product_count  
FROM zepto  
GROUP BY outOfStock;
```

outOfStock	product_count
0	3278
1	453

Here, 1 means out of stock and 0 mean product is in stock.

-- product names present multiple times

```
SELECT name, COUNT(*) AS Number_of_SKUs
FROM zepto
GROUP BY name
HAVING COUNT(*)>1
ORDER BY Number_of_SKUs DESC;
```

name	Number_of_SKUs
Amul Delicious Fat Spread - Cholesterol Free	10
Arden Eggs White	10
Mother's Recipe Tamarind Paste	10
Quaker Oats	10
Saffola Veggie Twist Masala Oats	10
Sunfeast YiPPee! Magic Masala Noodles	10
Sunfeast Yippee! Pasta Treat - Sour Cream Onion	10
Kellogg's Real Almond & Honey Corn Flakes	9
Amul Fresh Cream	8
Sugarfree Gold Low Calorie Sweetner	8
iD Idli & Dosa Batter	7
Himalaya Anti Dandruff Shampoo	6
Godrej Yummiez Chicken Breakfast Salami	6
Kellogg's Chocos	6
Kellogg's Special K Original Corn Flakes	6
Kitchens of India Dal Makhani	6
Kellogg's Original Corn Flakes	6
Maggi Magic Cubes Extra Chicken	6
Dove Hair Fall Rescue Shampoo	6
Everest Garam Masala	6
Everest Chicken Masala	6
Everest Tandoori Chicken Masala	6
Everest Kitchen King Masala	6
Godrej Yummiez Chicken Nuggets	6
Godrej Yummiez Chicken Punjabi Tikka	6
Godrej Yummiez Chilli Chicken Sausages	6
Aashirvaad Suji Halwa With Jaggery	6
Ching's Secret Green Chilli Sauce	6
Ching's Secret Just Soak - Veg Hakka Noodles	6
Closeup Everfresh+ Anti-Germ Gel Toothpaste ...	6
Suguna Nourish Egg	6
Smith & Jones Masala Noodles	6
Whisper Choice Regular Sanitary Pads	6

-- Data Cleaning

-- products with price = 0

```
SELECT *
FROM zepto
WHERE mrp = 0 or discountedSellingPrice = 0;
```

```
DELETE FROM zepto
WHERE mrp = 0;
```

-- mrps and discountedSellingPrice are in paise

-- Converting paise to rupees

```
UPDATE zepto
SET mrp = mrp/100.0,
discountedSellingPrice = discountedSellingPrice/100.0;
```

-- Q1. Find the top 10 best-value products based on the discount percentage.

```
SELECT TOP 10 *
FROM zepto
ORDER BY discountPercent DESC;
```

Category	name	mrp	discountPercent	availableQuantity	discountedSellingPrice	weightInGms	outOfStock	quantity
Biscuits	Dukes Waffy Chocolate Wafers	45	51	4	22	60	0	75
Biscuits	Dukes Waffy Orange Wafers	45	51	5	22	60	0	75
Biscuits	Dukes Waffy Strawberry Wafers	45	51	2	22	60	0	75
Cooking Essentials	Chef's Basket Durum Wheat Elbow Pasta	160	50	6	80	500	0	500
Cooking Essentials	Chef's Basket Durum Wheat Fusilli Pasta	160	50	6	80	500	0	500
Cooking Essentials	Ceres Foods Fish Mustard Instant Liqui...	220	50	6	110	200	0	200
Cooking Essentials	Ceres Foods Laal Maas Instant Liquid ...	220	50	5	110	200	0	200
Cooking Essentials	Ceres Foods Nalli Nihari Instant Liquid ...	220	50	6	110	200	0	200
Cooking Essentials	Chef's Basket Durum Wheat Penne Pa...	160	50	0	80	500	1	500
Munchies	Chef's Basket Durum Wheat Elbow Pasta	160	50	6	80	500	0	500

--Q2. What are the products with High MRP but out of stock

```
SELECT *
FROM zepto
WHERE outOfStock = 1 AND mrp>300;
```

Category	name	mrp	discountPercent	availableQuantity	discountedSellingPrice	weightInGms	outOfStock	quantity
Cooking Essentials	Aashirvaad Atta With Mutigrains	315	8	0	287	5000	1	5
Cooking Essentials	Everest Kashmiri Lal Chilli Powder	310	10	0	279	500	1	500
Cooking Essentials	Patanjali Cow's Ghee	565	0	0	565	1000	1	1
Munchies	Aashirvaad Atta With Mutigrains	315	8	0	287	5000	1	5
Munchies	Everest Kashmiri Lal Chilli Powder	310	10	0	279	500	1	500
Munchies	Patanjali Cow's Ghee	565	0	0	565	1000	1	1
Personal Care	MamyPoko Pants Standard Diapers, Extra Large (1...	399	7	0	369	26	1	26
Paan Corner	MamyPoko Pants Standard Diapers, Extra Large (1...	399	7	0	369	26	1	26

--Q3. Calculate Estimated Revenue for each category

```
SELECT Category, SUM(discountedSellingPrice*quantity) AS estimated_revenue
FROM zepto
```

GROUP BY Category

ORDER BY estimated_revenue DESC;

Category	estimated_revenue
Packaged Food	17349917
Ice Cream & Desserts	17349917
Chocolates & Candies	17349917
Cooking Essentials	13616226
Munchies	13616226
Paan Corner	12614825
Personal Care	12614825
Meats, Fish & Eggs	3693976
Home & Cleaning	3678343
Beverages	3330483
Dairy, Bread & Batter	3330483
Biscuits	1791431
Health & Hygiene	1496117
Fruits & Vegetables	440997

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

SELECT *

FROM zepto

WHERE mrp>500 AND discountPercent<10

ORDER BY mrp DESC, discountPercent DESC;

Category	name	mrp	discountPercent	availableQuantity	discountedSellingPrice	weightInGms	outOfStock	quantity
Cooking Essentials	Dhara Kachi Ghani Mustard Oil Jar	1250	8	6	1143	5000	0	5
Munchies	Dhara Kachi Ghani Mustard Oil Jar	1250	8	6	1143	5000	0	5
Cooking Essentials	Saffola Gold (Jar)	1240	0	6	1240	5000	0	5
Munchies	Saffola Gold (Jar)	1240	0	6	1240	5000	0	5
Munchies	Fortune Rice Bran Health Oil (Jar)	1050	1	6	1039	5000	0	5
Munchies	Dhara Filtered Groundnut Oil (Jar)	1050	1	6	1035	5000	0	5
Cooking Essentials	Fortune Rice Bran Health Oil (Jar)	1050	1	6	1039	5000	0	5
Cooking Essentials	Dhara Filtered Groundnut Oil (Jar)	1050	1	6	1035	5000	0	5
Cooking Essentials	Dhara Filtered Groundnut Oil (Jar)	1050	0	2	1050	5000	0	5
Munchies	Dhara Filtered Groundnut Oil (Jar)	1050	0	2	1050	5000	0	5
Cooking Essentials	Fortune Soyabean Oil	1005	0	6	999	5000	0	5
Munchies	Fortune Soyabean Oil	1005	0	6	999	5000	0	5
Munchies	Fortune Sunlite Refined Sunflower (Jar)	925	0	6	925	5000	0	5
Cooking Essentials	Fortune Sunlite Refined Sunflower (Jar)	925	0	6	925	5000	0	5
Home & Cleaning	Surf Excel Matic Powder Front Load	810	7	2	750	4000	0	4
Home & Cleaning	Surf Excel Matic Top Load	720	9	4	649	4000	0	4
Packaged Food	Pedigree Puppy Dry Dog Food Food Chicken & Milk	690	6	2	648	3000	0	3
Ice Cream & Desserts	Pedigree Puppy Dry Dog Food Food Chicken & Milk	690	6	2	648	3000	0	3
Chocolates & Candi...	Pedigree Puppy Dry Dog Food Food Chicken & Milk	690	6	2	648	3000	0	3
Chocolates & Candi...	Pedigree Dog Food Adult Meat & Rice	660	7	2	608	3000	0	3
Ice Cream & Desserts	Pedigree Dog Food Adult Meat & Rice	660	7	2	608	3000	0	3
Packaged Food	Pedigree Dog Food Adult Meat & Rice	660	7	2	608	3000	0	3
Home & Cleaning	Lizol Double Concentrate Disinfectant Floor Clean...	650	8	6	598	1900	0	1
Ice Cream & Desserts	Nestle Nestle Nan Pro Follow-Up Formula	650	0	6	650	400	0	400
Packaged Food	Nestle Nestle Nan Pro Follow-Up Formula	650	0	6	650	400	0	400
Chocolates & Candi...	Nestle Nestle Nan Pro Follow-Up Formula	650	0	6	650	400	0	400
Personal Care	Dove Daily Shine Shampoo	645	5	3	612	650	0	650
Paan Corner	Dove Daily Shine Shampoo	645	5	3	612	650	0	650
Paan Corner	L'Oreal Paris Excellence Creme Hair Color, 4.25 Ai...	620	0	6	620	172	0	172
Paan Corner	L'Oreal Paris Excellence Creme Hair Color, 1 Black	620	0	1	620	172	0	172
Paan Corner	L'Oreal Paris Excellence Creme Hair Color, 3 Dark ...	620	0	6	620	172	0	172
Personal Care	L'Oreal Paris Excellence Creme Hair Color, 4.25 Ai...	620	0	6	620	172	0	172
Personal Care	L'Oreal Paris Excellence Creme Hair Color, 4 Natu...	620	0	1	620	172	0	172
Chocolates & Candi...	Nestle Nan Pro 4 Follow Up Formula Powder For ...	620	0	1	620	400	0	400
Personal Care	L'Oreal Paris Excellence Creme Hair Color, 1 Black	620	0	1	620	172	0	172
Personal Care	L'Oreal Paris Excellence Creme Hair Color, 3 Dark ...	620	0	6	620	172	0	172
Packaged Food	Nestle Nan Pro 4 Follow Up Formula Powder For ...	620	0	1	620	400	0	400
Ice Cream & Desserts	Nestle Nan Pro 4 Follow Up Formula Powder For ...	620	0	1	620	400	0	400
Paan Corner	L'Oreal Paris Excellence Creme Hair Color, 4 Natu...	620	0	1	620	172	0	172
Packaged Food	Pediasure Premium Chocolate Powdered Health D...	610	0	2	610	400	0	400
Chocolates & Candi...	Pediasure Premium Chocolate Powdered Health D...	610	0	2	610	400	0	400
Ice Cream & Desserts	Pediasure Premium Chocolate Powdered Health D...	610	0	2	610	400	0	400
Home & Cleaning	Surf Excel Quick Wash	600	8	1	549	4000	0	4

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

```

SELECT TOP 5 Category, AVG(discountPercent) AS average_discount_percentage
FROM zepto
GROUP BY Category
ORDER BY average_discount_percentage DESC;

```

Category	average_discount_percentage
Fruits & Vegetables	15
Meats, Fish & Eggs	11
Packaged Food	8
Biscuits	8
Ice Cream & Desserts	8

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

```
SELECT Category, name, ROUND(discountedSellingPrice*1.0/weightInGms,3)*100 AS  
price_per_gram_in_paise  
FROM zepto  
WHERE weightInGms>100  
ORDER BY price_per_gram_in_paise;
```

Category	name	price_per_gram_in_paise
Health & Hygiene	Vicks Cough Drops Menthol	1.700000000000
Fruits & Vegetables	Onion	1.900000000000
Cooking Essentials	Aashirvaad Iodised Salt	1.900000000000
Munchies	Aashirvaad Iodised Salt	1.900000000000
Fruits & Vegetables	Onion	2.100000000000
Cooking Essentials	Tata Salt	2.400000000000
Munchies	Tata Salt	2.400000000000
Home & Cleaning	Shubh kart - Nirmal sugandhi mogra wet dhoop zip...	2.400000000000
Fruits & Vegetables	Beetroot	2.600000000000
Fruits & Vegetables	Potato	2.800000000000
Home & Cleaning	Shubh kart - Tejas Twisted Cotton Wicks 1000n	2.800000000000
Fruits & Vegetables	Potato	2.900000000000
Fruits & Vegetables	Carrot	3.000000000000
Fruits & Vegetables	Baby Potato	3.200000000000
Fruits & Vegetables	Raw Banana	3.400000000000
Fruits & Vegetables	Tomato Hybrid	3.500000000000
Fruits & Vegetables	Beetroot	3.600000000000
Cooking Essentials	Tata Salt Lite	3.600000000000
Munchies	Tata Salt Lite	3.600000000000
Munchies	Pillsbury Chakki Fresh Atta	3.800000000000
Cooking Essentials	Pillsbury Chakki Fresh Atta	3.800000000000
Fruits & Vegetables	Radish White	3.800000000000
Cooking Essentials	Aashirvaad Atta	4.000000000000
Munchies	Aashirvaad Atta	4.000000000000
Fruits & Vegetables	Capsicum	4.200000000000
Fruits & Vegetables	Carrot	4.400000000000
Cooking Essentials	Pillsbury Atta/Godihittu - Chakki Fresh	4.700000000000
Munchies	Pillsbury Atta/Godihittu - Chakki Fresh	4.700000000000
Home & Cleaning	Apsara Non Dust Eraser	4.700000000000
Fruits & Vegetables	Colocasia	4.800000000000
Fruits & Vegetables	Ladies Finger	4.800000000000
Cooking Essentials	Aashirvaad Superior MP Atta	4.900000000000
Cooking Essentials	Pillsbury Atta With Multigrains Wheat Grains	4.900000000000
Munchies	Pillsbury Atta With Multigrains Wheat Grains	4.900000000000
Munchies	Aashirvaad Superior MP Atta	4.900000000000
Fruits & Vegetables	Ridge Gourd	5.000000000000

--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;
```

name	weightInGms	weight_category
"Godrej Aer Power Pocket - Long Lasting Bathroom Fragrance Fresh Blossom"	10	Low
"Maggi Magic Cubes, Vegetarian Masala (Free 2 Cubes Inside)"	48	Low
"Maggi Magic Cubes, Vegetarian Masala"	40	Low
"Origami Good Karma Paper Serviettes - 100 napkins (1 ply)"	58	Low
24 Mantra Bura Sugar (Demerara)	500	Low
24 Mantra Groundnut Oil (Cold Pressed) Pet Bottle	1000	Medium
24 Mantra Mustard Oil (Cold Pressed)	1000	Medium
24 Mantra Organic Besan	500	Low
24 Mantra Organic Black Pepper	100	Low
24 Mantra Organic Brown Sona Masoori Rice	1000	Medium
24 Mantra Organic Chana Dal	500	Low
24 Mantra Organic Cumin	100	Low
24 Mantra Organic Cumin Powder	100	Low
24 Mantra Organic Green Moong Dal - Split	500	Low
24 Mantra Organic Jaggery Powder	500	Low
24 Mantra Organic Jowar Flour	500	Low
24 Mantra Organic Masoor Dal - Split	500	Low
24 Mantra Organic Moong Dal	500	Low
24 Mantra Organic Pancharatna Dal - Split	500	Low
24 Mantra Organic Peanuts	500	Low
24 Mantra Organic Puffed Rice	200	Low
24 Mantra Organic Ragi Flour	500	Low
24 Mantra Organic Rajma	500	Low
24 Mantra Organic Red Poha	500	Low
24 Mantra Organic Roasted Bengal Gram Dal	500	Low
24 Mantra Organic Sattu Atta	500	Low
24 Mantra Organic Tur Dal	1000	Medium
24 Mantra Organic Tur Dal - Split	500	Low
24 Mantra Organic Urad White Whole	500	Low

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

```
SELECT Category, ROUND(SUM(weightInGms*quantity)/1000.0,3) AS total_inventory_weight  
FROM zepto  
GROUP BY Category;
```


Category	total_inventory_weight
Packaged Food	42891.488000
Meats, Fish & Eggs	7430.828000
Biscuits	7317.165000
Beverages	9247.315000
Personal Care	21638.043000
Dairy, Bread & Ba...	9247.315000
Paan Corner	21638.043000
Home & Cleaning	14779.157000
Munchies	43869.767000
Ice Cream & Des...	42891.488000
Fruits & Vegetables	5544.710000
Health & Hygiene	2772.190000
Cooking Essentials	43869.767000
Chocolates & Ca...	42891.488000