

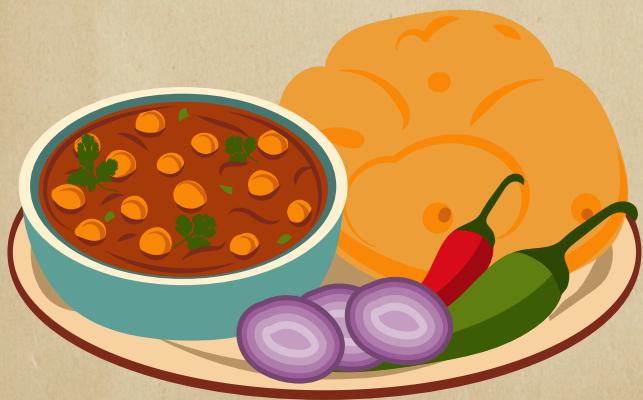


**bigbasket**

India's largest online supermarket



# Big Basket Analysis





## PROBLEM STATEMENT

Big Basket is an online grocery store that offers a wide variety of products. The company seeks to understand the sales trends, product performance, and customer preferences. They require insights to rank products, identify top-performing categories, analyze price differences, and create dynamic reports using advanced SQL queries and functionalities such as ranking, subqueries, views, and stored procedures.





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## OBJECTIVE

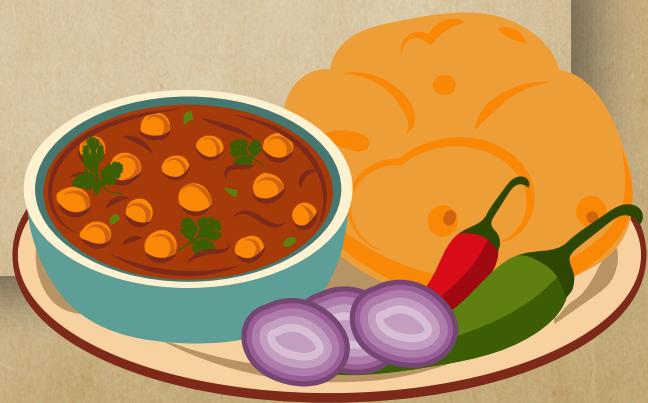
To analyze product sales performance and customer preferences using MySQL's advanced SQL functionalities, including ranking, lead and lag analysis, subqueries, views, stored procedures, and common table expressions (CTE).

# Q1. Rank products based on their sale price within each category.

```
1 •  select * from bigbasket;
2
3      /* Rank products based on their sale price within each category. */
4
5 •  select category,product,sale_price,
6      rank() over(partition by category order by sale_price desc) as rnk
7      from bigbasket;
```

Result Grid |  Filter Rows:  Export:  Wrap Cell Content: 

category	product	sale_price	rnk
Baby Care	Steam Steriliser With Tongs	3290	1
Baby Care	Diaper Pants Super Value Box - Small	2799	2
Baby Care	Mom & Baby Care Essentials Suitcase Gift Box	2399	3
Baby Care	Premium Care Large Diapers - Super Value Pack	2375	4
Baby Care	Premium Care Medium Diapers - Super Value Pack	2375	4
Baby Care	Premium Care X-Large Diapers - Super Value Pack	2375	4
Baby Care	Premium Care Small - 140 Diaper Pants	2199	7
Baby Care	Premium Soft Diaper Pants - Medium, Monthly P...	2183	8
Baby Care	Premium Soft Diaper Pants - Medium Size	2160	9
Baby Care	Diaper Pants Super Value Box - Medium	2087	10
Baby Care	Diaper Pants Super Value Box - Large	2087	10
Baby Care	Premium Soft Diaper Pants - Small Size	2018	12

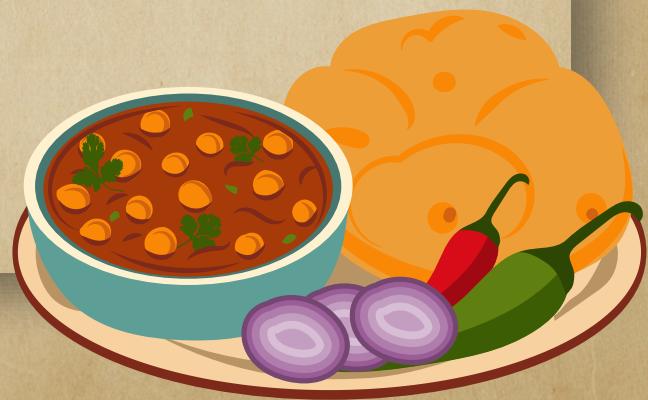


## Q2. Find the next product's sale price for comparison within the same category.

```
1 •  select * from bigbasket;
2
3      /* Find the next product's sale price for comparison within the same category. */
4
5 •  select id,product,category,sale_price,
6      lead(sale_price) over( partition by category order by sale_price) as next_price
7      from bigbasket;
```

---

		Result Grid		Filter Rows:	Export:	Wrap Cell Content:
		id	product	category	sale_price	next_price
▶	15212	Toothbrush - Junior	Baby Care	15	18	
	17548	New Born - 2 Diaper Pants	Baby Care	18	24	
	13089	New Medium - 2 Diaper Pants	Baby Care	24	28	
	13331	New Dry Large - 2 Diapers Pants	Baby Care	28	44	
	839	Baby Wipes - Gentle	Baby Care	44	49	
	19582	Soft Baby Wipes - With Green Tea Essence	Baby Care	49	49	
	16928	Nourishing Baby Wellness Soap	Baby Care	49	50	
	17232	Silicone Teether - Apple, Orange	Baby Care	50	50	
	11533	Baby Soap - Extra Moisturizing	Baby Care	50	50	
	26297	Sparkle Brush Pink	Baby Care	50	50	
	8447	Bottle & Nipple Cleaning Brush - Pink	Baby Care	50	52	
	17157	Rich Moisture Bar	Baby Care	52	53	



# Q3. Create a CTE to get the top 5 highest-rated products for each category.

```
1 •  select * from bigbasket;
2
3      /* Create a CTE to get the top 5 highest-rated products for each category. */
4
5 •  with cte as(
6      select *,
7          row_number() over(partition by category order by rating desc) as high_ratings
8      from bigbasket)
9      select id,product,category,rating,high_ratings from cte
10     where high_ratings<=5;
11
```

Result Grid | Filter Rows:  | Export: | Wrap Cell Content:

	id	product	category	rating	high_ratings
▶	26080	Natural Bath Essentials	Baby Care	5	1
	26190	Disposable Maternity & Nursing Breast Pads For...	Baby Care	5	2
	26754	Baby Happy Large - 48 Diapers	Baby Care	5	3
	18191	Face Cream - Natural Sensation	Baby Care	5	4
	19415	Baby Soft Relax Teether - 2 M+	Baby Care	5	5
	22865	Tempeh Cubes - Spiced Tawa Masala Soyabean	Bakery, Cakes & Dairy	5	1
	9912	Cheese Spreadz - Roasted Garlic Flavour	Bakery, Cakes & Dairy	5	2
	10890	Pain Au Levain - with Blueberries & Cranberries ...	Bakery, Cakes & Dairy	5	3
	10840	Cookies - Kesar Supreme	Bakery, Cakes & Dairy	5	4
	18600	Winkin Cow Classic Lassi	Bakery, Cakes & Dairy	5	5
	24164	Attraction Deodorant for Men - Long Lasting Lim...	Beauty & Hygiene	5	1
	25367	Peppermint Essential Oil	Beauty & Hygiene	5	2

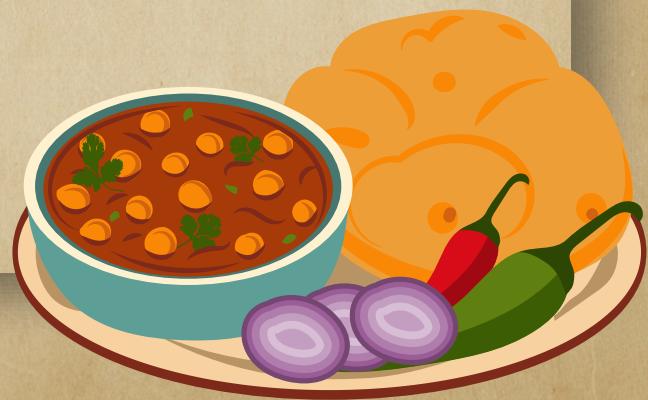


# Q4. Create a view to simplify querying for product information in the 'Beauty & Hygiene' category.

```
1 •  select * from bigbasket;
2
3      /* Create a view to simplify querying for product information in the 'Beauty & Hygiene' category. */
4
5 •  create view Beauty_Hyg as
6      select id,product,category,sale_price,rating
7      from bigbasket
8      where category="Beauty & hygiene";
9
10 • select * from Beauty_Hyg;
```

Result Grid |  Filter Rows:  Export:  Wrap Cell Content:  Fetch rows: 

	id	product	category	sale_price	rating
▶	1	Garlic Oil - Vegetarian Capsule 500 mg	Beauty & Hygiene	550	4.1
	5	Creme Soft Soap - For Hands & Body	Beauty & Hygiene	162	4.4
	7	Multani Mati	Beauty & Hygiene	58	3.6
	8	Hand Sanitizer - 70% Alcohol Base	Beauty & Hygiene	250	4
	9	Biotin & Collagen Volumizing Hair Shampoo + Bio...	Beauty & Hygiene	1098	3.5
	13	Face Wash - Oil Control, Active	Beauty & Hygiene	110	5
	17	Smooth Skin Oil - For Dry Skin	Beauty & Hygiene	324	5
	21	Ceramic Barrel Brush - Colour May Vary	Beauty & Hygiene	525	4.2
	30	Lip Butter - Rose	Beauty & Hygiene	169	1.5
	33	Amber - Deodorant Body Spray	Beauty & Hygiene	212	3.4
	38	Bodylicious Deodorant Spray - Mate (For Men)	Beauty & Hygiene	137	4.1
	39	Sport Deo Spray - Fresh, for Men	Beauty & Hygiene	113	3.7



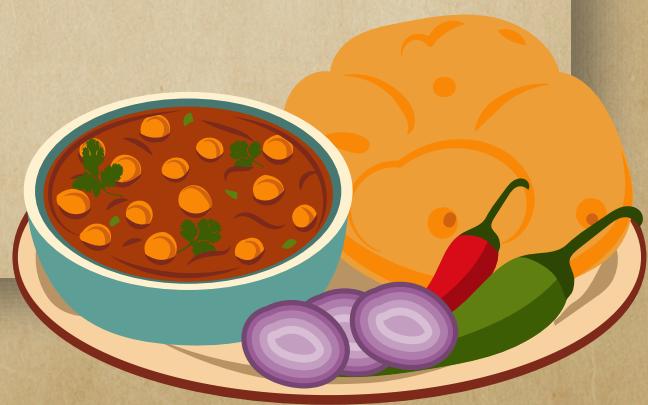
# Q5. Write a stored procedure to update the sale price of a product by its id.

```

1  /* Write a stored procedure to update the sale price of a product by its id. */
2  DELIMITER //
3 •  CREATE PROCEDURE upd_sale(in prd_id int,in new_sal int)
4  BEGIN
5      UPDATE bigbasket SET sale_price=new_sal
6          where id = prd_id;
7  END //
8  DELIMITER ;
9
10 • call upd_sale(1,550);

```

Result Grid								
	id	product	category	sub_category	brand	sale_price	market_price	type
1	Garlic Oil - Vegetarian Capsule 500 mg	Beauty & Hygiene	Hair Care	Sri Sri Ayurveda	550	220		Hair Oil & Ser
2	Water Bottle - Orange	Kitchen, Garden & Pets	Storage & Accessories	Mastercook	180	180		Water & Frid
3	Brass Angle Deep - Plain, No.2	Cleaning & Household	Pooja Needs	Trm	119	250		Lamp & Lamp
4	Cereal Flip Lid Container/Storage Jar - Assorted...	Cleaning & Household	Bins & Bathroom Ware	Nakoda	149	176		Laundry, Sto
5	Creme Soft Soap - For Hands & Body	Beauty & Hygiene	Bath & Hand Wash	Nivea	162	162		Bathing Bars
6	Germ - Removal Multipurpose Wipes	Cleaning & Household	All Purpose Cleaners	Nature Protect	169	199		Disinfectant S
7	Multani Mati	Beauty & Hygiene	Skin Care	Satinance	58	58		Face Care
8	Hand Sanitizer - 70% Alcohol Base	Beauty & Hygiene	Bath & Hand Wash	Bionova	250	250		Hand Wash &
9	Biotin & Collagen Volumizing Hair Shampoo + Bio...	Beauty & Hygiene	Hair Care	StBotanica	1098	1098		Shampoo & C
10	Scrub Pad - Anti- Bacterial, Regular	Cleaning & Household	Mops, Brushes & Scrubs	Scotch brite	20	20		Utensil Scrub
11	Wheat Grass Powder - Raw	Gourmet & World Food	Cooking & Baking Needs	NUTRASHIL	261	290		Flours & Pre-



# Q6. Create a CTE to show the total sales price per category and rank them.

```
1      /* Create a CTE to show the total sales price per category and rank them.*/
2
3 • WITH CTE AS (
4     SELECT category,sum(sale_price) as Total_Sales
5     from bigbasket
6     group by category)
7     select *,
8     DENSE_RANK() OVER(ORDER BY Total_Sales desc) as rnk
9     from CTE;
```

---

Result Grid |  Filter Rows:  Export:  Wrap Cell Content: 

category	Total_Sales	rnk
Beauty & Hygiene	1710859	1
Kitchen, Garden & Pets	1155795	2
Gourmet & World Food	634297	3
Cleaning & Household	423419	4
Foodgrains, Oil & Masala	374043	5
Snacks & Branded Foods	291301	6
Baby Care	239319	7
Beverages	145589	8
Bakery, Cakes & Dairy	94723	9

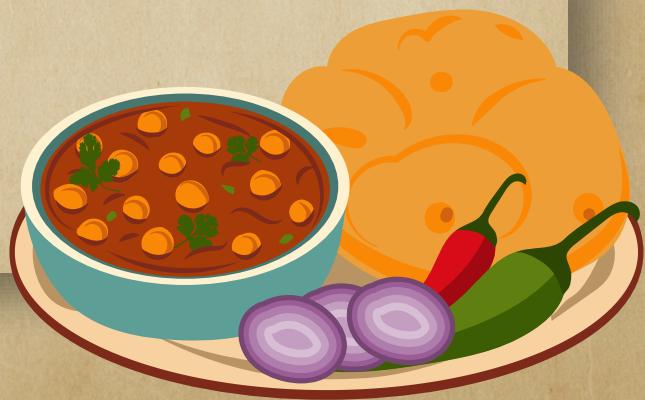




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## Q7. Create a view to store the sale price and market price difference for each product.

```
1  /* Create a view to store the sale price and market price difference for each product. */
2
3 •  create view sp_mp as
4    select product,sale_price,market_price,(sale_price-market_price) as diff
5    from bigbasket;
6
7 •  select * from sp_mp;
```

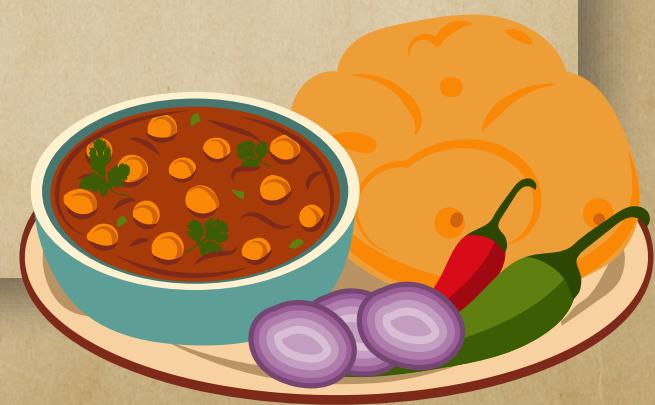


# Q8. Create a stored procedure to return products from a specific category and sub category.

```
1 •  select * from bigbasket;
2   /* Create a stored procedure to return products from a specific category and sub category. */
3
4   DELIMITER //
5 •  create procedure prd1(in prd varchar(255))
6   begin
7     select product,category,sub_category from bigbasket
8     where product=prd;
9   END //
10  DELIMITER ;
11 •  CALL prd1('Multani Mati');
12
13
```

---

Result Grid		
Filter Rows: <input type="text"/>		
Export:  Wrap Cell Content:		
product	category	sub_category
Multani Mati	Beauty & Hygiene	Skin Care

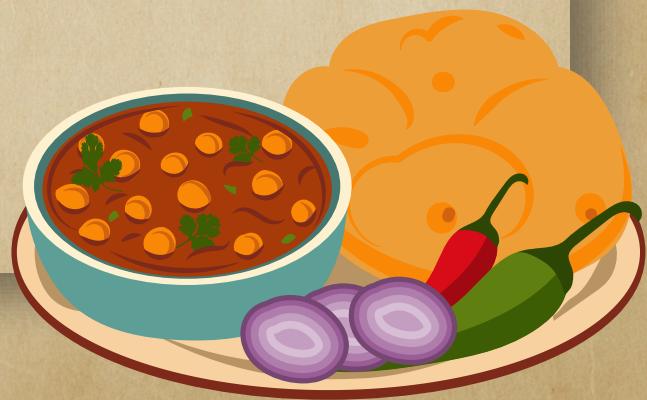




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## Q9. Use a subquery to find the product with the highest sale price in each category.

```
1 •  SELECT * FROM bigbasket;
2
3      /* Use a subquery to find the product with the highest sale price in each category. */
4 •  SELECT product, category, sale_price
5     FROM bigbasket b1
6     WHERE sale_price = (
7         SELECT MAX(sale_price)
8         FROM bigbasket b2
9         WHERE b1.category = b2.category
10    );
11
```





## Q10. Use CASE to assign discounts based on the market price of the products(>500 as high discount, from 200 to 500 as medium discount or else low discount).

```
1  /* Use CASE to assign discounts based on the market price of the
2   products(>500 as high discount, from 200 to 500 as
3   medium discount or else low discount). */
4
5
6 • select product,market_price,sale_price,
7   case when market_price>500 then 'high discount'
8     when market_price between 200 and 500 then 'medium discount'
9     else 'low discount'
10    end as discount
11   from bigbasket;
```

---

Result Grid				
	product	market_price	sale_price	discount
▶	Garlic Oil - Vegetarian Capsule 500 mg	220	550	medium discount
	Water Bottle - Orange	180	180	low discount
	Brass Angle Deep - Plain, No.2	250	119	medium discount
	Cereal Flip Lid Container/Storage Jar - Assorted...	176	149	low discount
	Cromo Soft Soap - For Hands & Body	162	162	low discount

*Thank  
You*

