Business Requests

1. Provide a list of products with a base price greater than 500 and that are featured in promo type of 'BOGOF' (Buy One Get One Free). This information will help us identify high-value products that are currently being heavily discounted, which can be useful for evaluating our pricing and C strategies

SELECT product as product, base_price as price, promo_type as promo from c9.model where base_price > 500 and promo_type = "BOGOF" order by base_price desc;



THERE ARE TWO PRODUCTS >500 AND BOGOF

2. An overview of the number of stores in each city. The results will be sorted in descending order of store counts

```
select city, count(store_id) as store_counts
from dim_stores
group by city
order by store_counts desc;
```

	City	store_count
	Bengaluru	10
	Chennai	8
	Hyderabad	7
	Visakhapatnam	5
	Coimbatore	5
	Madurai	4
	Mysuru	4
	Mangalore	3
	Trivandrum	2
•	Vijayawada	2

3. Total revenue generated before and after the campaign? The report includes three key fields: campaign_name, Before_promotion, After_promotion.

```
select
    campaign_id,
    round(SUM(Reveneu_before_promo)/1000000,2) AS Reveneu_before_promo,
    round(sum(Reveneu_after_promo)/1000000,2) AS Reveneu_after_promo
from dataset
group by campaign_id;
```

	campaign_id	Reveneu_before_promo	Reveneu_after_promo
•	Sankranti	58.13	124.15
	Diwali	82.57	171.46

4. Produce a report that calculates the Incremental Sold Quantity (ISU%) for each category during the Diwali campaign. Additionally, provide rankings for the categories based on their ISU%. The report will include three key fields: category, isu%, and rank order.

```
SELECT
  campaign_id,
  Category,
  ISU,
  ISU_percentage,
  RANK() OVER (ORDER BY ISU_percentage) AS ISU_rank
FROM (
  SELECT
    campaign id,
    Category,
    SUM(quantity_sold_after_promo) - SUM(quantity_sold_before_promo) AS ISU,
    ((SUM(quantity sold after promo) - SUM(quantity sold before promo)) /
NULLIF(SUM(quantity_sold_before_promo), 0)) * 100 AS ISU_percentage
  FROM
    dataset
  WHERE
    campaign_id = 'Diwali'
  GROUP BY
    Category
) AS subquery;
```

	campaign_id	Category	ISU	ISU_percentage	ISU_rank
١	Diwali	Grocery & Staples	10491	18.0478	1
	Diwali	Personal Care	5231	31.0574	2
	Diwali	Combo1	33978	202,3584	3
	Diwali	Home Care	27070	203.1367	4
	Diwali	Home Appliances	30776	588.4512	5

5. Create a report for Top 5 products, ranked by Incremental Revenue Percentage (IR%), across all campaigns. The report will provide essential information including product name, category, and ir%. This analysis helps identify the most successful products in terms of incremental revenue across our campaigns, assisting in product optimization.

```
select
```

```
Products,
Category,
round((sum(Reveneu_after_promo)/1000000)
(sum(Reveneu_before_promo)/1000000),2) as IR_millions,
round(((sum(Reveneu_after_promo) - sum(Reveneu_before_promo))
/(sum(Reveneu_before_promo)))*100, 2) as IR_percentage
from dataset
group by Products, Category
order by IR_percentage Desc
limit 5:
```

	Products	Category	IR_millions	IR_percentage
١	Atliq_waterproof_Immersion_Rod	Home Appliances	17.56	266.19
	Atliq_High_Glo_15W_LED_Bulb	Home Appliances	7.59	262.98
	Atliq_Double_Bedsheet_set	Home Care	12.92	258.27
	Atliq_Curtains	Home Care	3.52	255.34
	Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	17.36	160.01

Recommended Insights

STORE TYPE ANALYSIS

1. Top 10 stores on incremental revenue

```
select
Cities,
store_id,
round(sum(IR/1000000),2) as IR_millions
from dataset
group by store_id, Cities
```

order by IR_millions desc limit 10;

	Cities	store_id	IR_millions
•	Mysuru	STMYS-1	4.92
	Chennai	STCHE-4	4.83
	Bengaluru	STBLR-0	4.76
	Bengaluru	STBLR-7	4.72
	Chennai	STCHE-7	4.65
	Bengaluru	STBLR-6	4.61
	Chennai	STCHE-3	4.41
	Mysuru	STMYS-3	4.4
	Chennai	STCHE-6	4.04
	Bengaluru	STBLR-3	3.94

2. Bottom 10 stores based on ISU

select
Cities,
store_id,
sum(ISU) as ISU
from dataset
group by store_id, Cities
order by ISU
limit 10;

	Cities	store_id	ISU
•	Mangalore	STMLR-0	3978
	Visakhapatnam	STVSK-3	4553
	Visakhapatnam	STVSK-4	4988
	Trivandrum	STTRV-1	5072
	Vijayawada	STVJD-1	5302
	Trivandrum	STTRV-0	5306
	Mangalore	STMLR-2	5374
	Mangalore	STMLR-1	5481
	Vijayawada	STVJD-0	5870
	Coimbatore	STCBE-4	5942

3. Cities

select
Cities,
sum(ISU) as ISU
from dataset
group by Cities
order by ISU desc;

	Cities	ISU
١	Bengaluru	108162
	Chennai	86125
	Hyderabad	68763
	Coimbatore	40598
	Mysuru	36102
	Visakhapatnam	32995
	Madurai	32548
	Mangalore	14833
	Vijayawada	11172
	Trivandrum	10378

promotion TYPE ANALYSIS

1. Top two promotions based on IR

select

Promotions, round(sum(IR/1000000),2) as IR_millions

from dataset

group by Promotions

order by IR_millions desc

limit 2:

	dumy	IR_millions
•	500 Cashback	91.05
	BOGOF	69.32

2. Bottom 2 promotions based on ISU

select

dumy,

sum(ISU) as ISU

from dataset

group by dumy

order by ISU

limit 2;

	promo_type	Total_Incremental_Revenue_Sold_Units
•	25% OFF	-5717
	50% OFF	6931

3. Is there a significant difference in the performance of discount-based promotions versus BOGOF (Buy One Get One Free) or cashback promotions?

SELECT

CASE

WHEN Promotions IN ('25% OFF', '50% OFF', '33% OFF') THEN 'Discount'

WHEN Promotions IN ('500 Cashback') THEN 'Cashback'

WHEN Promotions IN ('BOGOF') THEN 'BOGOF'

END AS promotion_category,

ROUND(SUM(IR) / 1000000, 2) AS Incremental_Revenue

FROM

dataset

WHERE

Promotions IN ('25% OFF', '50% OFF', '33% OFF', 'BOGOF', '500 Cashback') GROUP BY

promotion_category;

	•
promotion_category	Incremental_Revenue
Discount	-5.46
BOGOF	69.32
Cashback	91.05
	Discount BOGOF

4. Increment sold units vs incremental revenue

select

Category,

round(sum(IR/1000000),2) as Incremental_Revenue,

sum(ISU) as Incremental_sold_units

from dataset

group by Category

ORDER BY Incremental_Revenue desc;

	Category	Incremental_Revenue	Incremental_sold_units
•	Combo 1	91.05	40881
	Home Appliances	25.15	92513
	Grocery & Staples	23.99	249639
	Home Care	15.55	52443
	Personal Care	-0.85	6200

Product category analysis

1. product has most significant lift in salse

select

Products,

round(sum(IR/1000000),2) as Incremental_Revenue

from dataset

group by Products

order by Incremental_Revenue;

	Products	Incremental_Revenue
•	Atliq_Sonamasuri_Rice (10KG)	-1.39
	Atliq_Fusion_Container_Set_of_3	-0.77
	Atliq_Doodh_Kesar_Body_Lotion (200ML)	-0.33
	Atliq_Body_Milk_Nourishing_Lotion (120ML)	-0.22
	Atliq_Masoor_Dal (1KG)	-0.18
	Atliq_Lime_Cool_Bathing_Bar (125GM)	-0.16
	Atliq_Cream_Beauty_Bathing_Soap (125GM)	-0.14
	Atliq_Scrub_Sponge_For_Dishwash	-0.11
	Atliq_Curtains	3.52
	Atliq_High_Glo_15W_LED_Bulb	7.59
	Atliq_Suflower_Oil (1L)	8.19
	Atliq_Double_Bedsheet_set	12.92
	Atliq_Farm_Chakki_Atta (1KG)	17.36
	Atliq_waterproof_Immersion_Rod	17.56
	Atliq_Home_Essential_8_Product_Combo	91.05

2. well vs poor among Products

select

Products,

Category,

round(sum(IR/1000000),2) as Incremental_Revenue,

CASE

WHEN Promotions IN ('25% OFF', '50% OFF', '33% OFF') THEN 'Discount'

WHEN Promotions IN ('500 Cashback') THEN 'Cashback'

WHEN Promotions IN ('BOGOF') THEN 'BOGOF'

END AS promotion_category

from dataset

group by Products,promotion_category,Category order by Incremental_Revenue;

	Products	Category	Incremental_Revenue	promotion_category
•	Atliq_Sonamasuri_Rice (10KG)	Grocery & Staples	-1.39	Discount
	Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	-1.38	Discount
	Atliq_Suflower_Oil (1L)	Grocery & Staples	-0.79	Discount
	Atliq_Fusion_Container_Set_of_3	Home Care	-0.77	Discount
	Atliq_Doodh_Kesar_Body_Lotion (200ML)	Personal Care	-0.33	Discount
	Atliq_Body_Milk_Nourishing_Lotion (120ML)	Personal Care	-0.22	Discount
	Atliq_Masoor_Dal (1KG)	Grocery & Staples	-0.18	Discount
	Atliq_Lime_Cool_Bathing_Bar (125GM)	Personal Care	-0.16	Discount
	Atliq_Cream_Beauty_Bathing_Soap (125GM)	Personal Care	-0.14	Discount
	Atliq_Scrub_Sponge_For_Dishwash	Home Care	-0.11	Discount
	Atliq_Curtains	Home Care	3.52	BOGOF
	Atliq_High_Glo_15W_LED_Bulb	Home Appliances	7.59	BOGOF
	Atliq_Suflower_Oil (1L)	Grocery & Staples	8.99	BOGOF
	Atliq_Double_Bedsheet_set	Home Care	12.92	BOGOF
	Atliq_waterproof_Immersion_Rod	Home Appliances	17.56	BOGOF
	Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	18.75	BOGOF
	Atliq_Home_Essential_8_Product_Combo	Combo 1	91.05	Cashback

More analysis

Top performing cities

SELECT

Cities,

ROUND(SUM(IR/1000000), 2) AS Incremental_Revenue,

campaign_id,

RANK() OVER (ORDER BY ROUND(SUM(IR/1000000), 2) DESC) AS revenue_rank FROM dataset

GROUP BY Cities, campaign_id;

Cities	IR	Campaign	Rank
Bengaluru	21.88	Diwali	1
Chennai	17.39	Diwali	2
Bengaluru	16.35	Sankranti	3
Chennai	13.32	Sankranti	4
Hyderabad	12.93	Diwali	5
Hyderabad	9.78	Sankranti	6
Mysuru	8.52	Diwali	7

Coimbatore	7.54	Diwali	8
Madurai	7.24	Diwali	9
Visakhapatnam	6.21	Diwali	10
Coimbatore	6.08	Sankranti	11
Mysuru	5.37	Sankranti	12
Madurai	5.16	Sankranti	13
Visakhapatnam	4.6	Sankranti	14
Mangalore	2.94	Diwali	15
Vijayawada	2.36	Diwali	16
Mangalore	2.03	Sankranti	17
Trivandrum	1.87	Diwali	18
Vijayawada	1.68	Sankranti	19
Trivandrum	1.62	Sankranti	20

City-specific Product Preferences:

select
Cities,
Products,
sum(ISU) as ISU
from dataset
group by Products, Cities
order by ISU desc

limit 5;

	Cities	Products	ISU
•	Bengaluru	Atliq_Farm_Chakki_Atta (1KG)	28629
	Bengaluru	Atliq_Suflower_Oil (1L)	25636
	Chennai	Atliq_Farm_Chakki_Atta (1KG)	23431
	Chennai	Atliq_Suflower_Oil (1L)	20531
	Hyderabad	Atliq_Farm_Chakki_Atta (1KG)	17846

Total

select

round(sum(Reveneu_before_promo)/1000000,2) as Reveneu_before_promo, round(sum(Reveneu_after_promo)/1000000,2) as Reveneu_after_promo, round(sum(IR)/1000000,2) as IR, sum(ISU) as quantity_sold_before_promo, sum(quantity_sold_before_promo) as ISU, sum(quantity_sold_after_promo) as quantity_sold_after_promo

from dataset

	Reveneu_before_promo	Reveneu_after_promo	IR	quantity_sold_before_promo	ISU	quantity_sold_after_promo
•	140.70	295.61	154.91	441676	209050	650726

Bestselling products in Bengaluru

select

Category,

Cities, sum(ISU) as ISU FROM dataset WHERE Cities = 'Bengaluru' group by Category, Cities order by ISU;

	Category	Cities	ISU
	Personal Care	Bengaluru	1644
•	Combo 1	Bengaluru	9991
	Home Care	Bengaluru	12944
	Home Appliances	Bengaluru	22384
	Grocery & Staples	Bengaluru	61199

Bestselling products in Trivandrum

select

Category,

Products,

Cities,

sum(ISU) as ISU

FROM

dataset

WHERE

Cities = 'Trivandrum' and Category = 'Grocery & Staples' group by Category, Cities, Products order by ISU desc;

	Category	Cities	ISU
•	Grocery & Staples	Trivandrum	5768
	Home Appliances	Trivandrum	2336
	Home Care	Trivandrum	1261
	Combo 1	Trivandrum	866
	Personal Care	Trivandrum	147