

SQL Queries

Q.1 provide a list of products with a base price > 500 and that are featured in BOGOF

```
select
    distinct p.product_code,
    p.product_name,
    p.category,
    f.base_price,
    f.promo_type
from fact_events as f
join dim_products as p
on p.product_code = f.product_code
where base_price >500 and promo_type ="BOGOF";
```

product_code	product_name	category	base_price	promo_type
P08	Atliq_Double_Bedsheet_set	Home Care	1190	BOGOF
P14	Atliq_waterproof_Immersion_Rod	Home Appliances	1020	BOGOF

Q.2 generate a report that showcase number of stores in each city ,order by descending

```
SELECT
    city,
    COUNT(distinct store_id) AS store_count
FROM
    dim_stores
GROUP BY
    city
ORDER BY store_count DESC;
```

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

Q.3 Generate a report , showcase each campaign along with the total revenue before and after campaign.
it includes
campaign_name,total_revenue(before_promotion),total_revenue(after_promotion)

```
-- change column names
ALTER TABLE fact_events
CHANGE COLUMN `quantity_sold(before_promo)` quantity_sold_before_promo INT;

ALTER TABLE fact_events
CHANGE COLUMN `quantity_sold(after_promo)` quantity_sold_after_promo INT;

SELECT
    c.campaign_id,
    c.campaign_name,
    SUM(f.base_price * f.quantity_sold_before_promo)/1000000 AS Total_Revenue_Before_Promo_millions,
    SUM(
        (CASE WHEN f.promo_type = '25% off' THEN f.base_price * f.quantity_sold_after_promo ELSE 0 END)+
        (CASE WHEN f.promo_type = '33% off' THEN f.base_price * f.quantity_sold_after_promo ELSE 0 END)+
        (CASE WHEN f.promo_type = '50% off' THEN f.base_price * f.quantity_sold_after_promo ELSE 0 END) +
        (CASE WHEN f.promo_type = '500 off' THEN f.base_price * f.quantity_sold_after_promo ELSE 0 END) +
        (CASE WHEN f.promo_type = 'BOGOF' THEN f.base_price * f.quantity_sold_after_promo ELSE 0 END)
    ) /1000000 AS Total_Revenue_After_Promo_millions
FROM
    fact_events AS f
JOIN
    dim_campaigns AS c ON c.campaign_id = f.campaign_id
GROUP BY
    c.campaign_id, c.campaign_name;
```

campaign_id	campaign_name	Total_Revenue_Before_Promo_millions	Total_Revenue_After_Promo_millions
CAMP_SAN_01	Sankranti	58.1274	103.1709
CAMP_DIW_01	Diwali	82.5738	55.1492

Q.4 calculate ISU % for each category during diwali campaign . provides ranking based on ISU %,

```

SELECT
    p.category,
    SUM(f.quantity_sold_before_promo) AS total_quantity_sold_before_promo,
    SUM(f.quantity_sold_after_promo) AS total_quantity_sold_after_promo,
    SUM(f.quantity_sold_after_promo) - SUM(f.quantity_sold_before_promo) AS increase_sold_
quantity,
    (SUM(f.quantity_sold_after_promo) - SUM(f.quantity_sold_before_promo)) / SUM(f.quantit
y_sold_before_promo) * 100 AS ISU_percentage

FROM
    fact_events AS f
JOIN
    dim_products AS p ON p.product_code = f.product_code
JOIN
    dim_campaigns as c ON f.campaign_id = c.campaign_id
WHERE
    c.campaign_name = 'Diwali'
GROUP BY
    p.category
ORDER BY
    ISU_percentage DESC;

```

Result Grid					
		Filter Rows:	Export:	Wrap Cell Content:	
category	total_quantity_sold_before_promo	total_quantity_sold_after_promo	increase_sold_quantity	ISU_percentage	
Home Appliances	5230	18003	12773	244.2256	
Combo1	16791	50769	33978	202.3584	
Home Care	13326	23938	10612	79.6338	
Personal Care	16843	22074	5231	31.0574	
Grocery & Staples	58129	68620	10491	18.0478	

Result 4 x

Q. 5 create a report featuring TOP 5 products by IR % across all campaigns

```

SELECT
    p.product_name,
    p.category,
    ROUND(SUM(f.quantity_sold_after_promo - f.quantity_sold_before_promo) / SUM(f.quantity
_sold_before_promo)* 100,2) AS ISU_percentage
FROM
    fact_events AS f
JOIN
    dim_products AS p ON p.product_code = f.product_code
GROUP BY
    p.product_name,
    p.category
ORDER BY
    ISU_percentage DESC
LIMIT 5;

```

Result Grid			
Filter Rows:		Export:	Wrap Cell Content:
product_name	category	ISU_percentage	
Atliq_waterproof_Immersion_Rod	Home Appliances	266.19	
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	262.98	
Atliq_Double_Bedsheet_set	Home Care	258.27	
Atliq_Curtains	Home Care	255.34	
Atliq_Home_Essential_8_Product_Combo	Combo1	183.33	

Result 5