



# Codebasics Resume Challenge #9

## Queries and Results

1. Provide a list of products with base price greater than 500 and featured in promo type BOGOF (Buy One Get One Free).

```
Select
    distinct product_code,
    p.product_name,
    p.category
from fact_events e
join dim_products p
    using(product_code)
where base_price>500 and
    promo_type="BOGOF";
```

Result



product_code	product_name	category
P08	Atliq_Double_Bedsheet_set	Home Care
P14	Atliq_waterproof_Immersion_Rod	Home Appliances

2. Generate a report that provides an overview of the number of stores in each city.



Result 

```
Select
    city,
    sum(1) as Store_Counts
FROM dim_stores
group by city
order by Store_Counts Desc;
```

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

### 3. Generate a report that displays each campaign along with the total revenue generated before and after the campaign.



```
(select
  *,
  case
    when promo_type = "50% off" then base_price * (1 - 0.50)
    when promo_type = "25% off" then base_price * (1 - 0.25)
    when promo_type = "bogof" then base_price * (1 - 0.50)
    when promo_type = "500 cashback" then (base_price - 500)
    when promo_type = "33% off" then base_price * (1 - 0.33)
    else base_price
  end as promo_price,
  if(promo_type = "BOGOF",2*`quantity_sold(after_promo)`, `quantity_sold(after_promo)`) as qty_after_promo
from fact_events)
select
  campaign_name,
  round(sum(base_price*`quantity_sold(before_promo)`)/1000000,2) as Total_revenue_before_promo_in_Millions,
  round(sum(promo_price*qty_after_promo)/1000000,2) as Total_revenue_after_promo_in_Millions
from fact_events_with_promo_price_and_corrected_qty
join dim_campaigns c using(campaign_id)
group by campaign_id;
```

Result

campaign_name	Total_revenue_before_promo_in_Millions	Total_revenue_after_promo_in_Millions
Sankranti	58.13	124.15
Diwali	82.57	171.46



# 4. Produce a report that calculates the Incremental Sold Unity% for each category during Diwali campaign. Also provide ranking for categories based on their ISU%



```
with cte1 as(select
  p.category,
  sum(`quantity_sold(before_promo)`) as Qty_before,
  sum(qty_after_promo) as Qty_after
from fact_events_with_promo_price_and_corrected_qty e
join dim_campaigns c using(campaign_id)
join dim_products p using(product_code)
where campaign_name = "Diwali"
group by category),
cte2 as(Select
  category,
  (Qty_after-Qty_before) as Incremental_sales,
  ((Qty_after-Qty_before)*100/Qty_before) as ISU_percent
from cte1)
select
  category,
  ISU_percent,
  rank() over(order by ISU_percent desc) as rank_order
from cte2;
```

Result

category	ISU_percent	rank_order
Home Appliances	588.4512	1
Home Care	203.1367	2
Combo 1	202.3584	3
Personal Care	31.0574	4
Grocery & Staples	18.0478	5

# 5. Create a report featuring the top 5 products ranked by IR% across all campaigns



```
with cte1 as (  
  select  
    product_name,  
    category,  
    sum(base_price*`quantity_sold(before_promo)` ) as revenue_before_promo,  
    sum(promo_price*qty_after_promo) as revenue_after_promo  
  from fact_events_with_promo_price_and_corrected_qty  
  join dim_products p using(product_code)  
  group by product_code)  
select  
  product_name,  
  category,  
  (revenue_after_promo - revenue_before_promo)*100/revenue_before_promo as IR_percent  
from cte1  
order by IR_percent desc  
Limit 5;
```

Result



product_name	category	IR_percent
Atliq_waterproof_Immersion_Rod	Home Appliances	266.187384
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	262.983626
Atliq_Double_Bedsheet_set	Home Care	258.267904
Atliq_Curtains	Home Care	255.335366
Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	160.005483

# Store Performance Analysis:

## Top 10 stores in terms of Incremental Revenue(IR) generated from the promotions.



```
select
  s.city,
  s.store_id,
  round((sum(revenue_after_promo)-sum(revenue_before_promo))/1000000,2) as IR_in_Millions
from fact_events_with_revenue_details
join dim_stores s using(store_id)
group by store_id
order by IR_in_Millions Desc
limit 10;
```

### Result



city	store_id	IR_in_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	4.40
Chennai	STCHE-6	4.04
Bengaluru	STBLR-3	3.94

# Store Performance Analysis:

## Bottom 10 stores in terms of Incremental Sold Units(ISU) generated from the promotions.



```
select
    s.city,
    s.store_id,
    sum(qty_after_promo) - sum(`quantity_sold(before_promo)`) as ISU
from fact_events_with_promo_price_and_corrected_qty
join dim_stores s using(store_id)
group by store_id
order by ISU
limit 10;
```

### Result



city	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



# Promotional Type Analysis:

## Top 2 promotional types that resulted in the highest Incremental Revenue.



```
select
    promo_type,
    round((sum(revenue_after_promo)-sum(revenue_before_promo))/1000000,2) as IR_in_Millions
from fact_events_with_revenue_details
group by promo_type
order by IR_in_Millions Desc
limit 2;
```

### Result



promo_type	IR_in_Millions
500 Cashback	91.05
BOGOF	69.32

# Promotional Type Analysis:

Bottom 2 promotional types in terms of their impact on Incremental Sold Units



```
select
    promo_type,
    sum(qty_after_promo) - sum(`quantity_sold(before_promo)`) as ISU
from fact_events_with_promo_price_and_corrected_qty
group by promo_type
order by ISU
limit 2;
```

Result



promo_type	ISU
25% OFF	-5717
50% OFF	6931

# Product and Category Analysis:

## Product categories and their lift in sales during the promotions



```
select
    category,
    ((sum(qty_after_promo)-sum(`quantity_sold(before_promo)`))*100/sum(`quantity_sold(before_promo)`)) as ISU_percent
from fact_events_with_promo_price_and_corrected_qty
join dim_products using(product_code)
group by category
order by ISU_percent desc;
```

### Result



category	ISU_percent
Home Appliances	628.7841
Home Care	265.3461
Grocery & Staples	196.6126
Combo1	183.3311
Personal Care	24.5021

# Product and Category Analysis:

## 5 Products that showed highest lift in sales during the promotions



```
select
  product_name,
  category,
  ((sum(qty_after_promo)-sum(`quantity_sold(before_promo)`))*100/sum(`quantity_sold(before_promo)`)) as ISU_percent
from fact_events_with_promo_price_and_corrected_qty
join dim_products using(product_code)
group by product_code
order by ISU_percent desc
limit 5;
```

### Result

product_name	category	ISU_percent
Atliq_waterproof_Immersion_Rod	Home Appliances	632.3748
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	625.9673
Atliq_Double_Bedsheet_set	Home Care	616.5358
Atliq_Curtains	Home Care	610.6707
Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	364.9660



# Product and Category Analysis:

## 5 Products that showed least lift in sales during the promotions



```
select
  product_name,
  category,
  ((sum(qty_after_promo)-sum(`quantity_sold(before_promo)`))*100/sum(`quantity_sold(before_promo)`)) as ISU_percent
from fact_events_with_promo_price_and_corrected_qty
join dim_products using(product_code)
group by product_code
order by ISU_percent
limit 5;
```

### Result



product_name	category	ISU_percent
Atliq_Fusion_Container_Set_of_3	Home Care	-14.1156
Atliq_Scrub_Sponge_For_Dishwash	Home Care	-13.4849
Atliq_Body_Milk_Nourishing_Lotion (120ML)	Personal Care	9.3461
Atliq_Cream_Beauty_Bathing_Soap (125GM)	Personal Care	20.6426
Atliq_Lime_Cool_Bathing_Bar (125GM)	Personal Care	33.1951