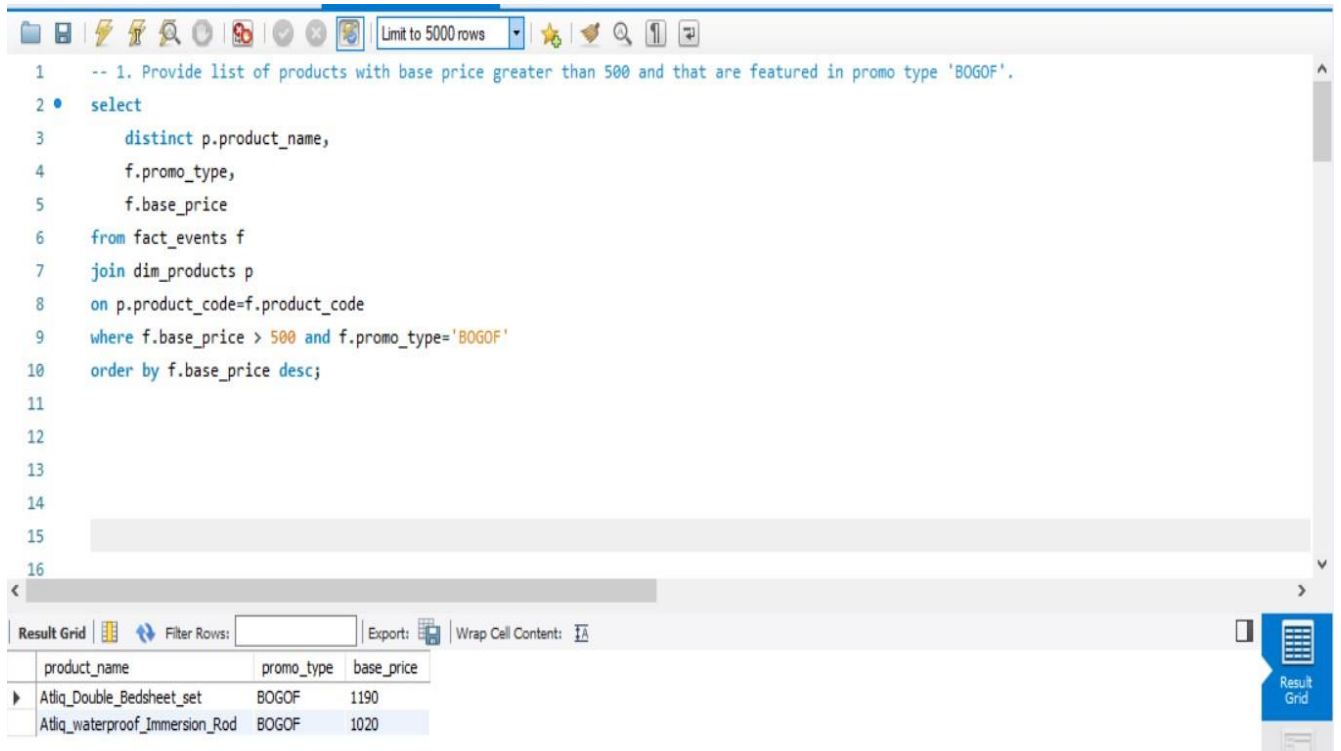


Ad-hoc analysis

1. Provide list of products with base price greater than 500 and that are featured in promo type 'BOGOF'.



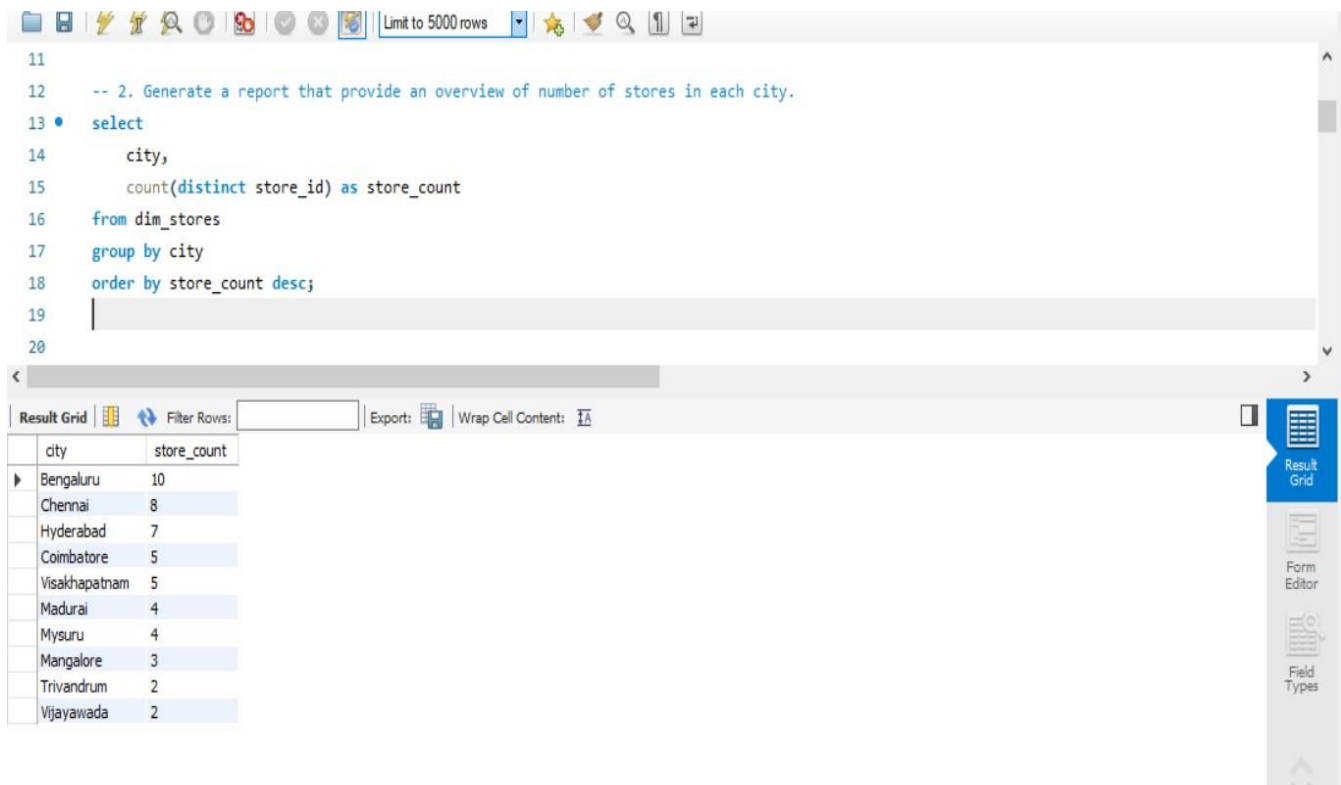
The screenshot shows a SQL query editor with a toolbar at the top. The query is as follows:

```
1  -- 1. Provide list of products with base price greater than 500 and that are featured in promo type 'BOGOF'.
2  • select
3      distinct p.product_name,
4          f.promo_type,
5          f.base_price
6  from fact_events f
7  join dim_products p
8  on p.product_code=f.product_code
9  where f.base_price > 500 and f.promo_type='BOGOF'
10 order by f.base_price desc;
```

Below the query editor, the 'Result Grid' is displayed with the following data:

product_name	promo_type	base_price
Atliq_Double_Bedsheet_set	BOGOF	1190
Atliq_waterproof_Immersion_Rod	BOGOF	1020

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



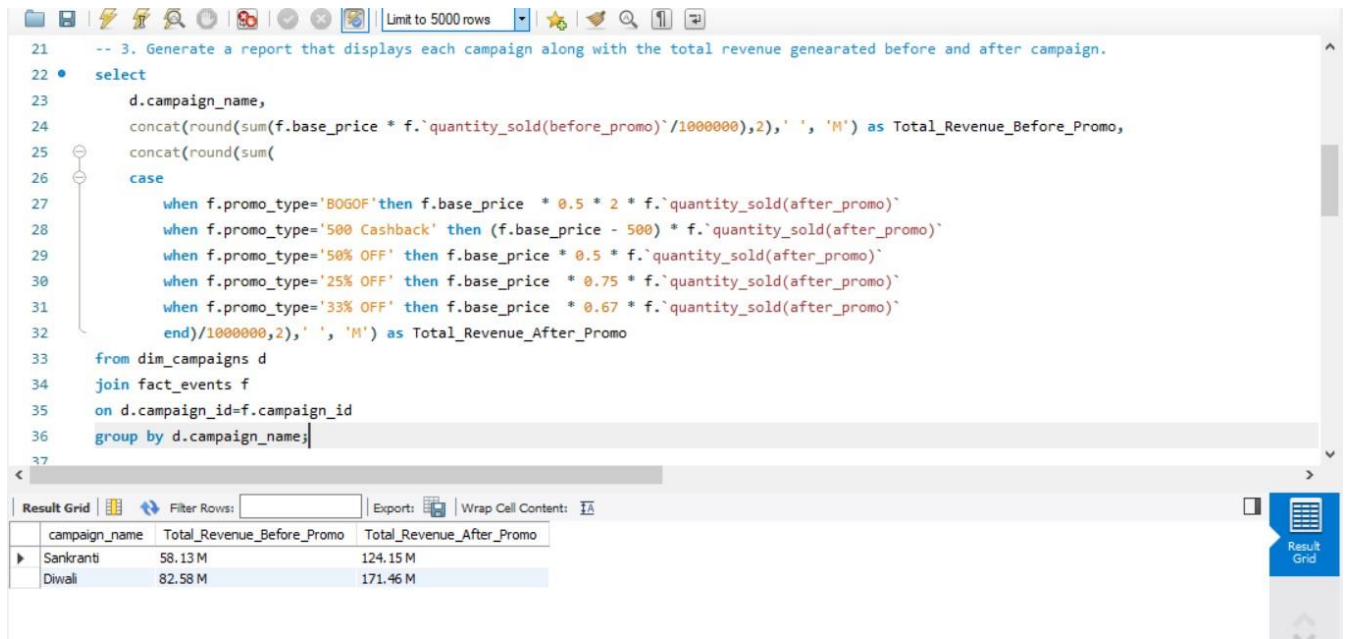
The screenshot shows a SQL query editor with a toolbar at the top. The query is as follows:

```
11
12  -- 2. Generate a report that provide an overview of number of stores in each city.
13  • select
14      city,
15      count(distinct store_id) as store_count
16  from dim_stores
17  group by city
18  order by store_count desc;
```

Below the query editor, the 'Result Grid' is displayed with the following data:

city	store_count
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 campaign.



The screenshot shows a SQL IDE with a query editor and a result grid. The query calculates total revenue before and after campaigns for 'Sankranti' and 'Diwali'.

```

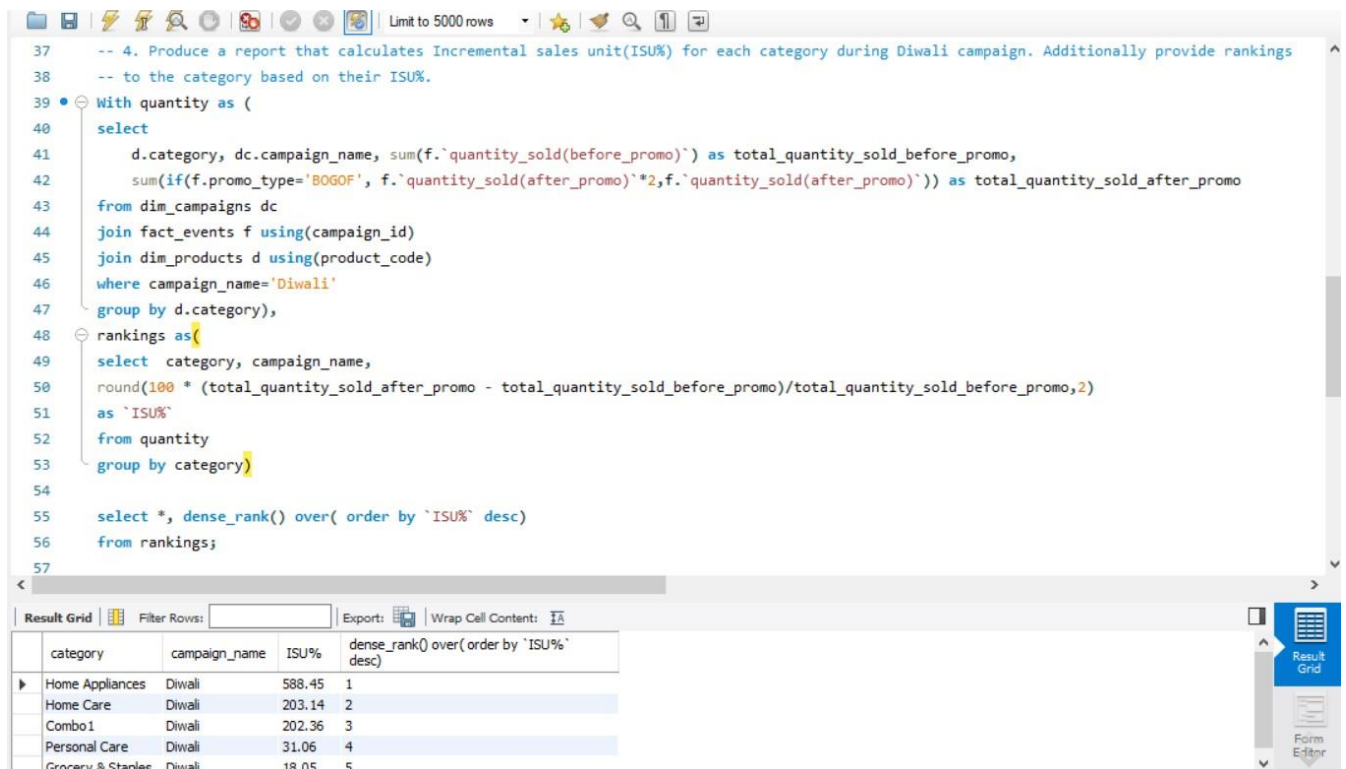
21 -- 3. Generate a report that displays each campaign along with the total revenue generated before and after campaign.
22 select
23     d.campaign_name,
24     concat(round(sum(f.base_price * f.`quantity_sold(before_promo)`) / 1000000, 2), ' ', 'M') as Total_Revenue_Before_Promo,
25     concat(round(sum(
26         case
27             when f.promo_type = 'BOGOF' then f.base_price * 0.5 * 2 * f.`quantity_sold(after_promo)`
28             when f.promo_type = '500 Cashback' then (f.base_price - 500) * f.`quantity_sold(after_promo)`
29             when f.promo_type = '50% OFF' then f.base_price * 0.5 * f.`quantity_sold(after_promo)`
30             when f.promo_type = '25% OFF' then f.base_price * 0.75 * f.`quantity_sold(after_promo)`
31             when f.promo_type = '33% OFF' then f.base_price * 0.67 * f.`quantity_sold(after_promo)`
32             end) / 1000000, 2), ' ', 'M') as Total_Revenue_After_Promo
33 from dim_campaigns d
34 join fact_events f
35 on d.campaign_id = f.campaign_id
36 group by d.campaign_name;
37

```

The result grid shows the following data:

campaign_name	Total_Revenue_Before_Promo	Total_Revenue_After_Promo
Sankranti	58.13 M	124.15 M
Diwali	82.58 M	171.46 M

4. Produce a report that calculates Incremental sales unit (ISU%) for each category during Diwali campaign. Additionally provide rankings to the category based on their ISU%.



The screenshot shows a SQL IDE with a query editor and a result grid. The query calculates the Incremental Sales Unit (ISU%) for each category during the Diwali campaign and provides rankings.

```

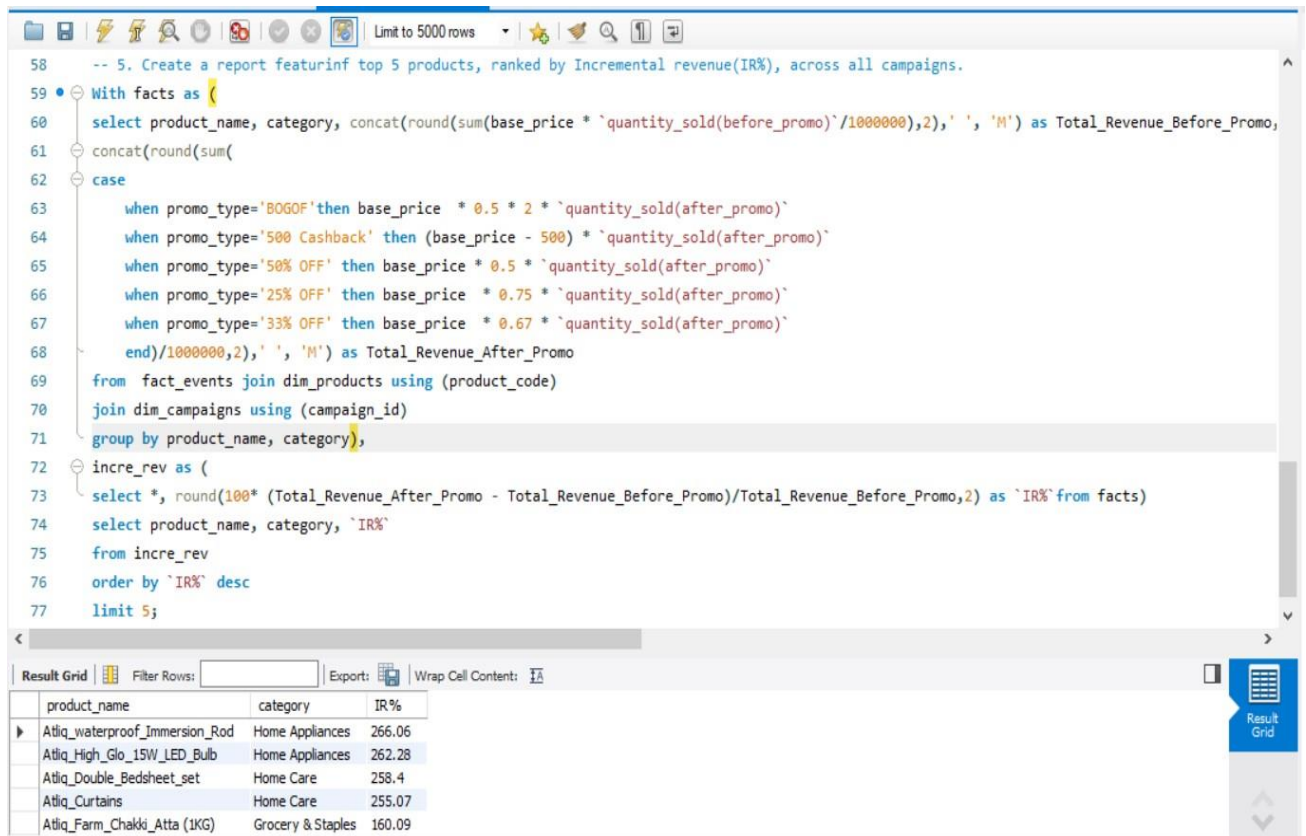
37 -- 4. Produce a report that calculates Incremental sales unit (ISU%) for each category during Diwali campaign. Additionally provide rankings
38 -- to the category based on their ISU%.
39 with quantity as (
40     select
41         d.category, dc.campaign_name, sum(f.`quantity_sold(before_promo)`) as total_quantity_sold_before_promo,
42         sum(if(f.promo_type = 'BOGOF', f.`quantity_sold(after_promo)` * 2, f.`quantity_sold(after_promo)`) as total_quantity_sold_after_promo
43     from dim_campaigns dc
44     join fact_events f using(campaign_id)
45     join dim_products d using(product_code)
46     where campaign_name = 'Diwali'
47     group by d.category),
48 rankings as (
49     select category, campaign_name,
50         round(100 * (total_quantity_sold_after_promo - total_quantity_sold_before_promo) / total_quantity_sold_before_promo, 2)
51         as `ISU%`
52     from quantity
53     group by category)
54
55 select *, dense_rank() over (order by `ISU%` desc)
56 from rankings;
57

```

The result grid shows the following data:

category	campaign_name	ISU%	dense_rank() over (order by 'ISU%' desc)
Home Appliances	Diwali	588.45	1
Home Care	Diwali	203.14	2
Combo1	Diwali	202.36	3
Personal Care	Diwali	31.06	4
Grocery & Staples	Diwali	18.05	5

5. Create a report featuring top 5 products, ranked by Incremental revenue (IR%), across all campaigns.



```
58 -- 5. Create a report featuring top 5 products, ranked by Incremental revenue(IR%), across all campaigns.
59 With facts as (
60   select product_name, category, concat(round(sum(base_price * `quantity_sold(before_promo)`/1000000),2), ' ', 'M') as Total_Revenue_Before_Promo,
61   concat(round(sum(
62     case
63       when promo_type='BOGOF' then base_price * 0.5 * 2 * `quantity_sold(after_promo)`
64       when promo_type='500 Cashback' then (base_price - 500) * `quantity_sold(after_promo)`
65       when promo_type='50% OFF' then base_price * 0.5 * `quantity_sold(after_promo)`
66       when promo_type='25% OFF' then base_price * 0.75 * `quantity_sold(after_promo)`
67       when promo_type='33% OFF' then base_price * 0.67 * `quantity_sold(after_promo)`
68     end)/1000000,2), ' ', 'M') as Total_Revenue_After_Promo
69   from fact_events join dim_products using (product_code)
70   join dim_campaigns using (campaign_id)
71   group by product_name, category),
72 incre_rev as (
73   select *, round(100* (Total_Revenue_After_Promo - Total_Revenue_Before_Promo)/Total_Revenue_Before_Promo,2) as `IR%` from facts)
74   select product_name, category, `IR%`
75   from incre_rev
76   order by `IR%` desc
77   limit 5;
```

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

product_name	category	IR%
Atliq_waterproof_Immersion_Rod	Home Appliances	266.06
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	262.28
Atliq_Double_Bedsheet_set	Home Care	258.4
Atliq_Curtains	Home Care	255.07
Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	160.09