SQL Challenge 6

Marketing Analysis



Intro

You are a Marketing Analyst. The 'Sustainable Clothing Co.' have been running several marketing campaigns and have asked you to provide your insight into whether they have been successful or not. Analyse the following data and answer the questions to form your answer.

Tables

Here are the tables you will be using

sustainable_clothing

Product ID	Product Name	Category	Size	Price
1	Organic Cotton T-Shirt	Tops	S	\$29.99
2	Recycled Denim Jeans	Bottoms	М	\$79.99
3	Hemp Crop Top	Tops	L	\$24.99
4	Bamboo Lounge Pants	Bottoms	XS	\$49.99
5	Eco-Friendly Hoodie	Outerwear	XL	\$59.99
6	Linen Button-Down Shirt	Tops	М	\$39.99
7	Organic Cotton Dress	Dresses	S	\$69.99
8	Sustainable Swim Shorts	Swimwear	L	\$34.99
9	Recycled Polyester Jacket	Outerwear	XL	\$89.99
10	Bamboo Yoga Leggings	Activewear	XS	\$54.99
11	Hemp Overalls	Bottoms	М	\$74.99
12	Organic Cotton Sweater	Tops	L	\$49.99
13	Cork Sandals	Footwear	S	\$39.99
14	Recycled Nylon Backpack	Accessories	One Size	\$59.99
15	Organic Cotton Skirt	Bottoms	XS	\$34.99
16	Hemp Baseball Cap	Accessories	One Size	\$24.99
17	Upcycled Denim Jacket	Outerwear	М	\$79.99
18	Linen Jumpsuit	Dresses	L	\$69.99
19	Organic Cotton Socks	Accessories	М	\$9.99
20	Bamboo Bathrobe	Loungewear	XL	\$69.99

transactions (first 10 shown)

transaction_id	product_id	quantity	purcahse_date	
1	2	2	2023-06-02	
1	14	1	2023-06-02	
2	5	2	2023-06-05	
3	2	1	2023-06-07	
4	19	2	2023-06-10	
5	2	1	2023-06-13	
5	16	1	2023-06-13	
6	10	2	2023-06-15	
7	2	1	2023-06-18	
8	4	1	2023-06-22	
9	18	2	2023-06-26	
10	2	1	2023-06-30	
10	13	1	2023-06-30	

marketing_campaigns

campaign_id	campaign_name	product_id	start_date	end_date
1	Summer Sale	2	2023-06-01	2023-06-30
2	New Collection Launch	10	2023-07-15	2023-08-15
3	Super Save	7	2023-08-20	2023-09-15

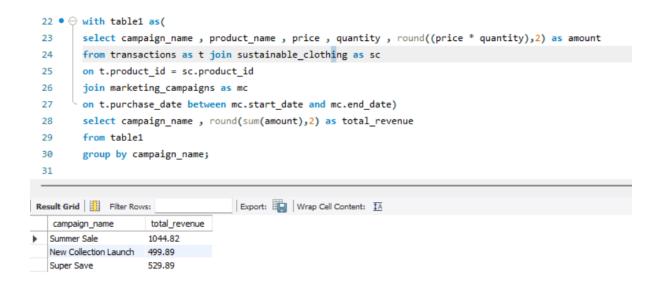
Questions

 How many transactions were completed during each marketing campaign?

2. Which product had the highest sales quantity?

```
select product_name , sum(quantity) as sales_quantity
         from sustainable_clothing as sc join transactions as t
 14
 15
        on sc.product_id = t.product_id
        group by product name
 16
        order by sales_quantity desc
 17
        limit 1;
 18
 19
                                                                                Export: Wrap Cell Content: TA Fetch rows:
   product name
                      sales_quantity
Organic Cotton Sweater
```

3. What is the total revenue generated from each marketing campaign?



4. What is the top-selling product category based on the total revenue generated?

```
34 • ⊖ with table1 as(
         select category , price , quantity , round((price * quantity),2) as amount
 35
         from transactions as t join sustainable_clothing as sc
  36
  37
         on t.product_id = sc.product_id)
         select category , sum(amount) as total_sales
  38
         from table1
  39
         group by category
 40
         order by total_sales desc
 41
         limit 1;
 42
 43
Result Grid Filter Rows:
                                       Export: Wrap Cell Content: IA
            total sales
    category
            1289.79
Bottoms
```

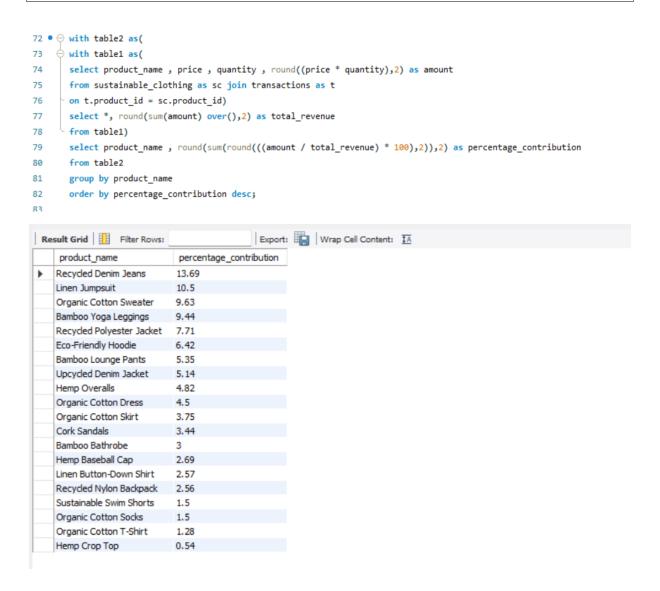
5. Which products had a higher quantity sold compared to the average quantity sold?

```
46 • ⊖ with table2 as(
      with table1 as(
 47
         select product_name, sum(quantity) as quantity_sold
 48
         from transactions as t join sustainable_clothing as sc
 49
 50
         on t.product_id = sc.product_id
         group by product_name
 51
 52
         order by quantity_sold desc)
       select *, round(avg(quantity_sold) over()) as avg_quantity from table1)
53
         select product name
 54
         from table2
 55
         where quantity sold > avg quantity;
 56
 57
Result Grid Filter Rows:
                                        Export: Wrap Cell Content: IA
   product_name
  Organic Cotton Sweater
  Recycled Denim Jeans
  Bamboo Yoga Leggings
  Linen Jumpsuit
  Organic Cotton Socks
  Bamboo Lounge Pants
  Eco-Friendly Hoodie
  Organic Cotton Skirt
  Hemp Baseball Cap
```

6. What is the average revenue generated per day during the marketing campaigns?

```
select campaign_name , product_name ,quantity , price ,purchase_date , round((quantity * price),2) as amount
    from transactions as t join marketing_campaigns as mc
62
    on t.purchase_date between mc.start_date and mc.end_date
    join sustainable_clothing as sc
     on mc.product_id = sc.product_id)
    select distinct purchase_date , round(avg(amount) over(partition by purchase_date),2) as per_day_sales
66
67
     from table1
     order by purchase_date asc;
Result Grid Filter Rows:
                                            Export: Wrap Cell Content: IA
    purchase_date per_day_sales
   2023-06-02
                   119.98
    2023-06-05
                159.98
    2023-06-07
                  79.99
    2023-06-10 159.98
    2023-06-13
                  79.99
    2023-06-15 159.98
    2023-06-18 79.99
    2023-06-22 79.99
    2023-06-26
               159.98
    2023-06-30 79.99
    2023-07-16
                  54.99
    2023-07-20 54.99
    2023-07-24
                  109.98
    2023-07-29 54.99
    2023-08-03
                 54.99
                109.98
    2023-08-08
    2023-08-14
                  54.99
    2023-08-20 139.98
    2023-08-27
                  69.99
    2023-09-01 139.98
    2023-09-05
                   69.99
                69.99
    2023-09-10
    2023-09-14
                  104.98
```

7. What is the percentage contribution of each product to the total revenue?



8. Compare the average quantity sold during marketing campaigns to outside the marketing campaigns

9. Compare the revenue generated by products inside the marketing campaigns to outside the campaigns

```
select round(sum(round((price * quantity),2)),2) as total_revenue
101
         from transactions as t join sustainable_clothing as sc
102
103
        on t.product_id = sc.product_id),
105 ⊝ table2 as(
       select round(sum(round((price * quantity),2)),2) as revenue_inside_campaign
106
 107
         from transactions as t join sustainable_clothing as sc
       on t.product_id = sc.product_id
109
        join marketing_campaigns as mc
110
        on t.purchase_date between mc.start_date and mc.end_date)
 112
        select total_revenue ,revenue_inside_campaign , (total_revenue - revenue_inside_campaign) as revenue_outside_campaign
        from table1 , table2;
113
114
Result Grid Filter Rows:
                                    Export: Wrap Cell Content: IA
   total_revenue revenue_inside_campaign revenue_outside_campaign
4669.12
              2074.6
                                   2594.52
```

10. Rank the products by their average daily quantity sold

2

3

3

3

3

4

4

Organic Cotton T-Shirt 4

Hemp Baseball Cap 3

Organic Cotton Skirt 3

Bamboo Lounge Pants 2 Eco-Friendly Hoodie 2 Hemp Crop Top

Linen Button-Down Shirt 2

Recycled Denim Jeans Organic Cotton Dress 1

2

Organic Cotton Sweater Recycled Nylon Backpack 3

Sustainable Swim Shorts Bamboo Yoga Leggings 3

Cork Sandals

Linen Jumpsuit

Bamboo Bathrobe

Hemp Overalls

```
122 • ⊖ with table2 as(
123  with table1 as(
      select product_name , quantity , purchase_date , sum(quantity) over(partition by purchase_date) as pd_qty
       from transactions as t join sustainable_clothing as sc
      on t.product_id = sc.product_id)
       select distinct product_name , round(avg(pd_qty) over(partition by product_name)) as average_daily_quantity
     from table1)
128
     select * , dense_rank() over(order by average_Daily_quantity desc) as ranking
130
       from table2;
Result Grid Filter Rows:
                                          Export: Wrap Cell Content: IA
    product_name average_daily_quantity ranking
Recycled Polyester Jacket 5
                                                 1
   Upcycled Denim Jacket 5
    Organic Cotton Socks
```