

Second: Write a query that directly answers a predetermined question from a business stakeholder

Write a SQL query against your new structured relational data model that answers one of the following bullet points below of your choosing. Commit it to the git repository along with the rest of the exercise.

Note: When creating your data model be mindful of the other requests being made by the business stakeholder. If you can capture more than one bullet point in your model while keeping it clean, efficient, and performant, that benefits you as well as your team.

- What are the top 5 brands by receipts scanned for most recent month?
- How does the ranking of the top 5 brands by receipts scanned for the recent month compare to the ranking for the previous month?
- When considering *average spend* from receipts with 'rewardsReceiptStatus' of 'Accepted' or 'Rejected', which is greater?
- When considering *total number of items purchased* from receipts with 'rewardsReceiptStatus' of 'Accepted' or 'Rejected', which is greater?
- Which brand has the most *spend* among users who were created within the past 6 months?
- Which brand has the most *transactions* among users who were created within the past 6 months?

```
1)SELECT r.brand, COUNT(r.receipt_id) AS receipts_scanned
```

```
FROM Receipts r
```

```
WHERE DATE_FORMAT (r.date_scanned, '%Y-%m') = DATE_FORMAT(CURRENT_DATE, '%Y-%m') -- Filter  
for the most recent month
```

```
GROUP BY r.brand
```

```
ORDER BY receipts_scanned DESC
```

```
LIMIT 5;
```

```
2)SELECT recent.brands AS recent_month_brands, previous.brands AS previous_month_brands
```

```
FROM (
```

```
    SELECT r.brand AS brands, RANK() OVER (ORDER BY COUNT(r.receipt_id) DESC) AS rank
```

```

FROM Receipts r

WHERE DATE_FORMAT(r.date_scanned, '%Y-%m') = DATE_FORMAT(CURRENT_DATE, '%Y-%m') --
Filter for the recent month

GROUP BY r.brand

ORDER BY rank

LIMIT 5

) recent

JOIN (

SELECT r.brand AS brands, RANK() OVER (ORDER BY COUNT(r.receipt_id) DESC) AS rank

FROM Receipts r

WHERE DATE_FORMAT(r.date_scanned, '%Y-%m') = DATE_FORMAT(DATE_SUB(CURRENT_DATE,
INTERVAL 1 MONTH), '%Y-%m') -- Filter for the previous month

GROUP BY r.brand

ORDER BY rank

LIMIT 5

) previous ON recent.rank = previous.rank;

```

```

3)SELECT rewardsReceiptStatus, AVG(totalSpent) AS averageSpend

FROM Receipts

WHERE rewardsReceiptStatus IN ('Accepted', 'Rejected')

GROUP BY rewardsReceiptStatus;

```

```

4)SELECT rewardsReceiptStatus, SUM (purchasedItemCount) AS totalItemsPurchased

FROM Receipts

WHERE rewardsReceiptStatus IN ('Accepted', 'Rejected')

GROUP BY rewardsReceiptStatus;

```