2. SQL QUERIES

1. What are the top 5 brands by receipts scanned for most recent month?

```
SELECT b.name AS brand_name, COUNT(*) AS receipt_count
FROM Receipts r
JOIN Brand b ON r.brand_id = b.brand_id
WHERE MONTH(r.createDate) = MONTH(CURRENT_DATE) AND YEAR(r.createDate) =
YEAR(CURRENT_DATE)
GROUP BY b.name
ORDER BY receipt_count DESC
LIMIT 5;
```

2. How does the ranking of the top 5 brands by receipts scanned for the recent month compare to the ranking for the previous month?

```
WITH recent_month AS (
SELECT b.name AS brand_name, COUNT(*) AS receipt_count
FROM Receipts r
JOIN Brand b ON r.brand_id = b.brand_id
WHERE MONTH(r.createDate) = MONTH(CURRENT_DATE) AND YEAR(r.createDate) =
YEAR(CURRENT_DATE)
GROUP BY b.name
ORDER BY receipt_count DESC
LIMIT 5
), previous_month AS (
SELECT b.name AS brand_name, COUNT(*) AS receipt_count
FROM Receipts r
JOIN Brand b ON r.brand_id = b.brand_id
WHERE MONTH(r.createDate) = MONTH(CURRENT_DATE) - 1 AND YEAR(r.createDate) =
YEAR(CURRENT_DATE)
GROUP BY b.name
ORDER BY receipt_count DESC
LIMIT 5
)

SELECT recent_month.brand_name AS recent_brand_name,
recent_month.receipt_count AS recent_receipt_count, previous_month.brand_name AS
previous_brand_name, previous_month.receipt_count AS previous_receipt_count
FROM recent_month
```

```
LEFT JOIN previous_month ON recent_month.brand_name =
previous_month.brand_name;
```

3. When considering *average spend* from receipts with 'rewardsReceiptStatus' of 'Accepted' or 'Rejected', which is greater?

```
SELECT rewardsReceiptStatus, AVG(purchaseTotal) AS averageSpend
FROM your_table_name
WHERE rewardsReceiptStatus = 'Accepted' OR rewardsReceiptStatus = 'Rejected'
GROUP BY rewardsReceiptStatus;
```

4. When considering *total number of items purchased* from receipts with 'rewardsReceiptStatus' of 'Accepted' or 'Rejected', which is greater?

```
SELECT rewardsReceiptStatus, SUM(purchasedItemCount) AS totalItems
FROM your_table_name
WHERE rewardsReceiptStatus = 'Accepted' OR rewardsReceiptStatus = 'Rejected'
GROUP BY rewardsReceiptStatus;
```

5. Which brand has the most *spend* among users who were created within the past 6 months?

```
Select Users.user_id, Users. createdDate, Receipts.receipt_id as rid, Receipts.totalSpent,
Transaction.receipt_id as tid, Transaction.brand_id as tbid, brand._
From Users(((
Join Receipts on Users.user_id = Receipts.userId)
Join Transaction on tid = Receipts.receipt_id)
Join Brand on Brand.brand_id = tbid)
Top (totalSpent)
Where createdDate = Dateadd(Month, datediff(Month, O, Dateadd (m, -6,
current_timestamp)),0);xs
```

6. Which brand has the most *transactions* among users who were created within the past 6 months?

```
Select Users.users_id, Users.createdDate, Receipts.receipt_id as rid,
Receipts.totalSpent, Transaction.receipt_id as tid, Transaction.brand_id as tbid,
brand.brand_id
From((( Users
Join Receipts on Users.user id = Receipts.userId)
Join Transaction on tid = Receipts.receipt id)
```

```
Join Brand on Brand.brand id = tbid)
Count (rewardsReceiptitemList)
Where createdDate = Dateadd(Month, datediff(Month,0, Dateadd(m,-6, current_
timestamp)), 0);
```