SQL Query

(Jet SQL)

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

```
SELECT top 5 Brand.brandName, count(rewardsReceiptsItemList.brand_id) AS
total_num

FROM Receipts, Brand, rewardsReceiptsItemList

WHERE Receipts.receipts_id = rewardsReceiptsItemList.receipts_id

AND rewardsReceiptsItemList.brand_id = Brand.brand_id

AND Receipts.dataScanned Between Date() And DateAdd("M", -1, Date( ))

GROUP BY Brand.brandName

ORDER BY count(rewardsReceiptsItemList.brand_id) DESC;
```

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?**
   - Query for the recent month

```
SELECT top 5 Brand.brandName, count(rewardsReceiptsItemList.brand_id) AS
total_num

FROM Receipts, Brand, rewardsReceiptsItemList

WHERE Receipts.receipts_id = rewardsReceiptsItemList.receipts_id

AND rewardsReceiptsItemList.brand_id = Brand.brand_id

AND Receipts.dataScanned Between Date() And DateAdd("M", -1, Date( ))

GROUP BY Brand.brandName

ORDER BY count(rewardsReceiptsItemList.brand_id) DESC;
```

- Query for the previous month

```
SELECT top5 Brand.brandName, count(rewardsReceiptsItemList.brand_id) AS total_num

FROM Receipts, Brand, rewardsReceiptsItemList

WHERE Receipts.receipts_id = rewardsReceiptsItemList.receipts_id

AND rewardsReceiptsItemList.brand_id = Brand.brand_id

AND Receipts.dataScanned Between  DateAdd("M", -1, Date( )) And DateAdd("M", -2, Date( ))

GROUP BY Brand.brandName

ORDER BY count(rewardsReceiptsItemList.brand_id) DESC;
```

3. **When considering *average spend* from receipts with 'rewardsReceiptStatus' of 'Accepted' or 'Rejected', which is greater?**
- Query for the average spend from receipts with 'rewardsReceiptStatus' of 'Accepted' (Status of Accepted in Receipts data is shown as 'Finished')

```
SELECT AVG(totalSpent) AS avg_spend

FROM Receipts

WHERE rewardsReceiptStatus = "ACCEPTED";
```

- Query for the average spend from receipts with 'rewardsReceiptStatus' of 'Rejected'

```
SELECT AVG(totalSpent) AS avg_spend

FROM Receipts

WHERE rewardsReceiptStatus = "REJECTED";
```

- Then, compare the outcomes to see which is greater

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

- Query for the total number of items purchased from receipts with 'rewardsReceiptStatus' of 'Accepted' (Status of Accepted in Receipts data is shown as 'Finished')

```
SELECT SUM(purchasedItemCount) AS total_purchased

FROM Receipts

WHERE rewardsReceiptStatus = "ACCEPTED";
```

- Query for the total number of items purchased from receipts with 'rewardsReceiptStatus' of 'Rejected'

```
SELECT SUM(purchasedItemCount) AS total_purchased

FROM Receipts

WHERE rewardsReceiptStatus = "REJECTED";
```

- Then, compare the outcomes to see which is greater

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

```
SELECT top 1 Brand.brandName, sum(rewardsReceiptsItemList.Amount) AS Amount

FROM Brand, rewardsReceiptsItemList, Users, Receipts

WHERE Brand.brand_id = rewardsReceiptsItemList.brand_id

AND Users.users_id = Receipts.userID

AND Receipts.receipts_id = rewardsReceiptsItemList.receipts_id

AND Users.createdDate Between Date() And DateAdd("M", -6, Date( ))

GROUP BY Brand.brandName

ORDER BY sum(rewardsReceiptsItemList.Amount) DESC;
```

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

SELECT top 1 Brand.brandName, count(rewardsReceiptsItemList.brand_id) AS total_tansactions

FROM Brand, rewardsReceiptsItemList, Users, Receipts

WHERE Brand.brand_id = rewardsReceiptsItemList.brand_id

AND Users.users_id = Receipts.userID

AND Receipts.receipts_id = rewardsReceiptsItemList.receipts_id

AND Users.createdDate Between Date() And DateAdd("M", -6, Date( ))

GROUP BY Brand.brandName

ORDER BY count(rewardsReceiptsItemList.brand_id) DESC;