

SQL queries

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

```
SELECT rewardsReceiptStatus, AVG(totalSpent) AS avg_spend FROM Receipt WHERE  
rewardsReceiptStatus IN ('Accepted', 'Rejected') GROUP BY rewardsReceiptStatus;
```

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

```
SELECT rewardsReceiptStatus, SUM(purchasedItemCount) AS total_items FROM Receipt  
WHERE rewardsReceiptStatus IN ('Accepted', 'Rejected') GROUP BY  
rewardsReceiptStatus;
```

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

```
WITH RecentUsers AS ( SELECT _id FROM User WHERE createdDate >= Dateadd(Month,  
Datediff(Month, 0, DATEADD(m, -6,  
current_timestamp))), 0), ReceiptItems AS ( SELECT r.userId, ri.brandCode,  
CAST(ri.finalPrice AS FLOAT) AS finalPrice FROM Receipt r JOIN RecentUsers u ON  
r.userId = u._id JOIN RewardsReceiptItemList ri ON r._id = ri.receiptId WHERE  
r.rewardsReceiptStatus IN ('Accepted', 'Rejected') ) SELECT b.name AS brandName,  
SUM(ri.finalPrice) AS totalSpend FROM ReceiptItems ri JOIN Brand b ON ri.brandCode =  
b.brandCode GROUP BY b.name ORDER BY totalSpend DESC LIMIT 1;
```

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

```
WITH RecentUsers AS ( SELECT _id FROM User WHERE createdDate >= Dateadd(Month,  
Datediff(Month, 0, DATEADD(m, -6,  
current_timestamp))), 0), ReceiptItems AS ( SELECT r.userId, ri.brandCode FROM Receipt  
r JOIN RecentUsers u ON r.userId = u._id JOIN RewardsReceiptItemList ri ON r._id =  
ri.receiptId WHERE r.rewardsReceiptStatus IN ('Accepted', 'Rejected') ) SELECT b.name  
AS brandName, COUNT(*) AS totalTransactions FROM ReceiptItems ri JOIN Brand b ON  
ri.brandCode = b.brandCode GROUP BY b.name ORDER BY totalTransactions DESC LIMIT  
1;
```