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

```
SELECT b.name AS brand_name, COUNT(r.receipt_id) AS receipts_scanned
FROM Brand b

JOIN Item i ON b.brand_id = i.brand_id

JOIN ReceiptItem ri ON i.item_id = ri.item_id

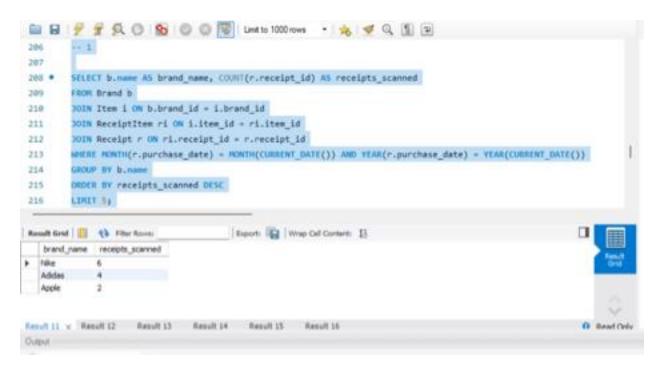
JOIN Receipt r ON ri.receipt_id = r.receipt_id

WHERE MONTH(r.purchase_date) = MONTH(CURRENT_DATE()) AND YEAR(r.purchase_date) = YEAR(CURRENT_DATE())

GROUP BY b.name

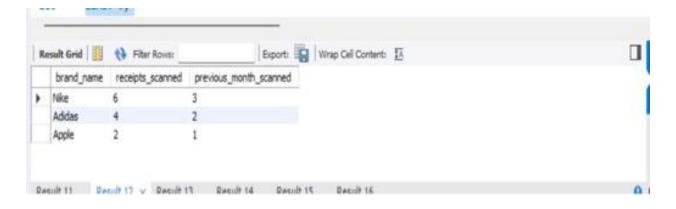
ORDER BY receipts_scanned DESC

LIMIT 5;
```



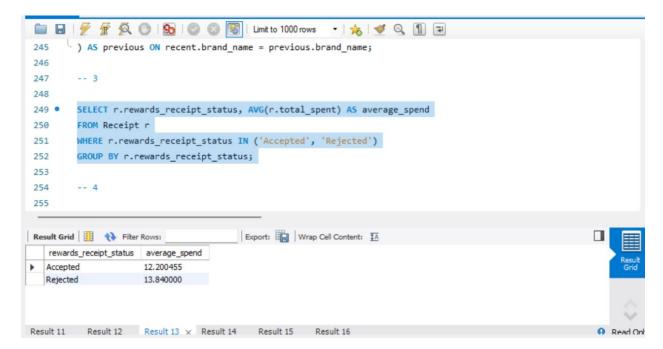
How does the ranking of the top 5 brands by receipts scanned for the recent month compare to the ranking for the previous month?

```
SELECT recent.brand name, recent.receipts scanned, previous.receipts scanned AS
previous month scanned
FROM (
SELECT b.name AS brand name, COUNT(r.receipt id) AS receipts scanned
FROM Brand b
JOIN Item i ON b.brand id = i.brand id
JOIN ReceiptItem ri ON i.item_id = ri.item_id
JOIN Receipt r ON ri.receipt id = r.receipt id
WHERE MONTH(r.purchase_date) = MONTH(CURRENT_DATE()) AND YEAR(r.purchase_date) =
YEAR(CURRENT DATE())
GROUP BY b.name
ORDER BY receipts scanned DESC
LIMIT 5
) AS recent
LEFT JOIN (
SELECT b.name AS brand_name, COUNT(r.receipt_id) AS receipts_scanned
FROM Brand b
JOIN Item i ON b.brand id = i.brand id
JOIN ReceiptItem ri ON i.item id = ri.item id
JOIN Receipt r ON ri.receipt_id = r.receipt_id
WHERE MONTH(r.purchase date) = MONTH(CURRENT DATE() - INTERVAL 1 MONTH) AND
YEAR(r.purchase_date) = YEAR(CURRENT_DATE() - INTERVAL 1 MONTH)
GROUP BY b.name
ORDER BY receipts scanned DESC
LIMIT 5
) AS previous ON recent.brand name = previous.brand name;
```



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

SELECT r.rewards\_receipt\_status, AVG(r.total\_spent) AS average\_spend FROM Receipt r
WHERE r.rewards\_receipt\_status IN ('Accepted', 'Rejected')
GROUP BY r.rewards\_receipt\_status;



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

```
SELECT r.rewards_receipt_status, SUM(ri.quantity_purchased) AS total_items_purchased FROM Receipt r

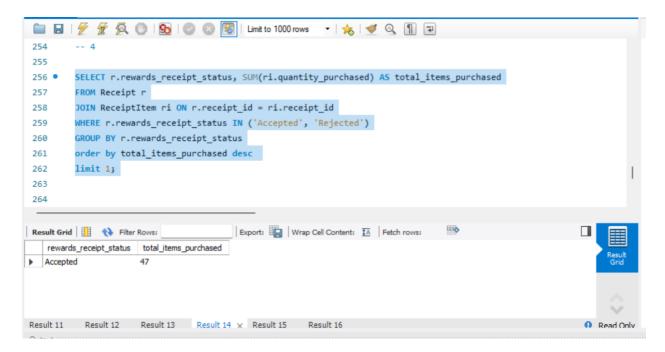
JOIN ReceiptItem ri ON r.receipt_id = ri.receipt_id

WHERE r.rewards_receipt_status IN ('Accepted', 'Rejected')

GROUP BY r.rewards_receipt_status

order by total_items_purchased desc

limit 1;
```



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

```
SELECT b.name AS brand_name, SUM(r.total_spent) AS total_spend
FROM Brand b

JOIN Item i ON b.brand_id = i.brand_id

JOIN ReceiptItem ri ON i.item_id = ri.item_id

JOIN Receipt r ON ri.receipt_id = r.receipt_id

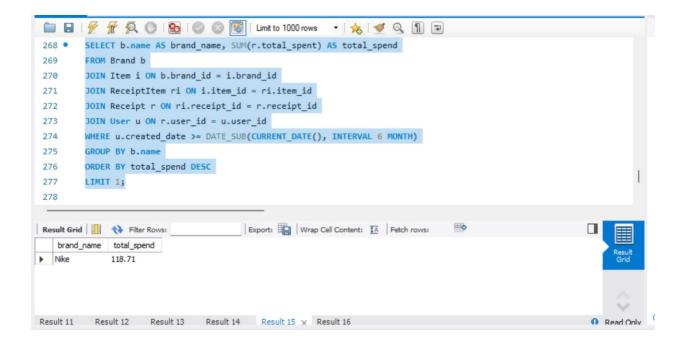
JOIN User u ON r.user_id = u.user_id

WHERE u.created_date >= DATE_SUB(CURRENT_DATE(), INTERVAL 6 MONTH)

GROUP BY b.name

ORDER BY total_spend DESC

LIMIT 1;
```



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

```
SELECT b.name AS brand_name, COUNT(r.receipt_id) AS total_transactions
FROM Brand b

JOIN Item i ON b.brand_id = i.brand_id

JOIN ReceiptItem ri ON i.item_id = ri.item_id

JOIN Receipt r ON ri.receipt_id = r.receipt_id

JOIN User u ON r.user_id = u.user_id

WHERE u.created_date >= DATE_SUB(CURRENT_DATE(), INTERVAL 6 MONTH)

GROUP BY b.name

ORDER BY total_transactions DESC

LIMIT 1;
```

