

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

Ans: SELECT B.BrandName as BrandName, COUNT(R.ReceiptID) as AS ReceiptScanned
FROM Brands B JOIN RewardsReceipt RR ON RR.Description LIKE ('%' + B.BrandName + '%')
JOIN Receipts R ON R.ReceiptID = RR.ReceiptID
WHERE DATEPART(m, R.DateScanned) = DATEPART(m, DATEADD(m, -1, getdate()))
AND DATEPART(yyyy, R.DateScanned) = DATEPART(yyyy, DATEADD(m, -1, getdate()))
GROUP BY BrandName
ORDER BY ReceiptScanned DESC
LIMIT 5

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

Ans: SELECT RewardsReceiptStatus AS ReceiptStatus, AVG(TotalSpend) AS AverageSpend
FROM Receipts R
GROUP BY RewardsReceiptStatus
ORDER BY AverageSpend DESC
LIMIT 1

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

Ans: SELECT RewardsReceiptStatus AS ReceiptStatus, PurchaseItemCount AS TotalItemsPurchased
FROM Receipts R
GROUP BY RewardsReceiptStatus
ORDER BY TotalItemsPurchased DESC
LIMIT 1

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

Ans: SELECT B.BrandName as BrandName, SUM(R.TotalSpent) as Spendings
FROM Brands B JOIN RewardsReceipt RR ON RR.Description LIKE ('%' + B.BrandName + '%')
JOIN Receipts R ON R.ReceiptID = RR.ReceiptID
JOIN Users U ON R.UserID = U.UserID
WHERE DATEPART(m, U.CreateDate) > DATEPART(m, DATEADD(m, -6, getdate()))
AND DATEPART(yyyy, U.CreateDate) = DATEPART(yyyy, DATEADD(m, -1, getdate()))
GROUP BY BrandName
ORDER BY Spendings DESC
LIMIT 1

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

Ans: SELECT B.BrandName as BrandName, COUNT(R.ReceiptID) as TransactionCount
FROM Brands B JOIN RewardsReceipt RR ON RR.Description LIKE ('%' + B.BrandName + '%')
JOIN Receipts R ON R.ReceiptID = RR.ReceiptID
JOIN Users U ON R.UserID = U.UserID
WHERE DATEPART(m, U.CreateDate) > DATEPART(m, DATEADD(m, -6, getdate()))
AND DATEPART(yyyy, U.CreateDate) = DATEPART(yyyy, DATEADD(m, -1, getdate()))
GROUP BY BrandName
ORDER BY TransactionCount DESC
LIMIT 1