**SQL Queries – Interview Case Assignment**

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

Ans:

Select "name", receipts\_scanned

From (

select b."name",

(select count(\*)

from "trans" as t, "item" as i

where b."brandcode" = i."brandcode"

and i."oid" = t."oid"

and t."datescanned" >= '2021-01-25 00:00:00-05') as receipts\_scanned

from "brands" as b

) as subquery

Where receipts\_scanned is not null

And receipts\_scanned > 0

Order by receipts\_scanned desc

Limit 5;

**Question 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?**

Ans:

Select "name", receipts\_scanned

From (

select b."name",

(select count(\*)

from "trans" as t, "item" as i

where b."brandcode" = i."brandcode"

and i."oid" = t."oid"

and t."datescanned" >= '2020-12-25 00:00:00-05'

and t."datescanned" < '2021-01-25 00:00:00-05') as receipts\_scanned

from "brands" as b

) as subquery

Where receipts\_scanned is not null

And receipts\_scanned > 0

Order by receipts\_scanned desc

Limit 5;

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

Ans:

Select AVG(totalSpent) From Receipts

Where rewardsReceiptStatus = “Accepted”;

*Output: Average spend on receipts with rewards status “Accepted”*

Select AVG(totalSpent) From Receipts

Where rewardsReceiptStatus = “Rejected”;

*Output: Average spend on receipts with rewards status “Rejected”. We compare the values returned by the above statements to find the greater among the two.*

## **Question 4: When considering total number of items purchased from receipts with 'rewardsReceiptStatus’ of ‘Accepted’ or ‘Rejected’, which is greater?**

Ans:

Select COUNT(purchasedItemCount) From Receipts

Where rewardsReceiptStatus = “Accepted”;

*Output: Count of items purchased on receipts with rewards status “Accepted”*

Select COUNT(purchasedItemCount) From Receipts

Where rewardsReceiptStatus = “Rejected”;

*Output: Count of items purchased on receipts with rewards status “Rejected”. We compare the values returned by the above statements to find the greater among the two.*

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

Ans:

Select Users.user\_id, Users.createdDate, Receipts.receipt\_id as rid, Receipts.totalSpent, Transaction.receipt\_id as tid, Transaction.brand\_id as tbid, brand.\_id  
From((( Users

Join Receipts on Users.user\_id = Receipts.userId) Join Transactions on tid = Receipts.receipt\_id) Join Brands on Brand.brand\_id = tbid)

Top (totalSpent)  
Where createdDate = Dateadd(Month,datediff(Month,0,Dateadd(m,-6,current\_timestamp)),0)

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

Ans:

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 Transactions on tid = Receipts.receipt\_id) Join Brands on Brand.brand\_id = tbid)

Count (rewardsReceiptItemList)  
Where createdDate = Dateadd(Month,datediff(Month,0,Dateadd(m,-6,current\_timestamp)),0)