

SQL queries for question from Buisness Stakeholder

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

Solution

```
SELECT
CASE
WHEN difference > 0 THEN 'Average accepted spend is greater'
WHEN difference < 0 THEN 'Average rejected spend is greater'
ELSE 'Both are equal'
END AS Answer
FROM
(SELECT (averageAcceptedSpend - averageRejectedSpend) AS difference FROM
(SELECT
AVG(CASE when rewardsReceiptStatus = 'Accepted' THEN totalSpent ELSE 0 END) AS
averageAcceptedSpend,
AVG(CASE when rewardsReceiptStatus = 'Rejected' THEN totalSpent ELSE 0 END) AS
averageRejectedSpend
FROM Receipts));
```

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

Solution

```
SELECT
CASE
WHEN difference > 0 THEN 'Total accepted items is greater'
WHEN difference < 0 THEN 'Total rejected items is greater'
ELSE 'Both are equal'
END AS Answer
FROM
(SELECT (totalAcceptedItem - totalRejectedItem) AS difference
FROM
(SELECT
sum(CASE
WHEN rewardsReceiptStatus = 'Accepted' THEN purchasedItemCount ELSE 0 END)
AS totalAcceptedItem,
sum(CASE
WHEN rewardsReceiptStatus = 'Rejected' THEN purchasedItemCount ELSE 0 END)
AS totalRejectedItem
FROM Receipts));
```

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

```
SELECT brand_name , temp.TotalPrice
FROM brands
INNER JOIN
```

```
(SELECT barcode , sum(final_price) AS TotalPrice
FROM RewardsReceiptItemList
WHERE receipt_id IN
```

```
(SELECT receipt_id
FROM User receipts
WHERE user_id IN
```

```
(SELECT user_id
FROM User Status
WHERE createdDate > date_sub(now(),Interval 6 month)))
GROUP BY barcode)
```

```
temp ON brands.barcode = temp.barcode
ORDER BY temp.TotalPrice
DESC LIMIT 1 ;
```

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

```
SELECT brand_name , temp.TotalNumBarcode
FROM brands
INNER JOIN
```

```
(SELECT barcode , sum(barcode) AS TotalNumBarcode
FROM RewardsReceiptItemList WHERE receipt_id IN
```

```
(SELECT receipt_id FROM User receipts
WHERE user_id IN
```

```
(SELECT user_id FROM User Status
WHERE createdDate > date_sub(now(),Interval 6 month)))
GROUP BY barcode) temp
```

```
ON brands.barcode = temp.barcode
ORDER BY temp.TotalNumBarcode DESC LIMIT 1 ;
```