The SQL query is written in PostgreSQL dialect

Q1. What are the top 5 brands by receipts scanned for most recent month

```
WITH RecentMonthReceipts AS (

  SELECT

    brand_id,

    COUNT(*) AS receipt_count

  FROM

    Fct_receipts

  WHERE

    DATE_TRUNC('month', purchaseDate) = DATE_TRUNC('month', CURRENT_DATE - INTERVAL '1 month')

  GROUP BY

    brand_id

)

SELECT

  b.name AS brand_name,

  r.receipt_count

FROM

  RecentMonthReceipts r

JOIN

  dim_brands b ON r.brand_id = b.brand_id

ORDER BY

  r.receipt_count DESC

LIMIT 5;
```

Q3. When considering average spend from receipts with 'rewardsReceiptStatus' of 'Accepted' or 'Rejected', which is greater?

```
SELECT

  rewardsReceiptStatus,

  AVG(totalSpent) AS average_spent

FROM

  Fct_receipts

WHERE

  rewardsReceiptStatus IN ('Accepted', 'Rejected')

GROUP BY

  rewardsReceiptStatus

ORDER BY

  average_spent DESC;
```

Q4. 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_purchased

FROM

  Fct_receipts

WHERE

  rewardsReceiptStatus IN ('Accepted', 'Rejected')

GROUP BY

  rewardsReceiptStatus

ORDER BY

  total_items_purchased DESC;
```

Q5. Which brand has the most spend among users who were created within the past 6 months?

```sql
WITH RecentUsers AS (

  SELECT

    Users_id

  FROM

    dim_users

  WHERE

    createdDate >= CURRENT_DATE - INTERVAL '6 months'
)
SELECT

  b.name AS brand_name,

  SUM(f.totalSpent) AS total_spent

FROM

  Fct_receipts f

JOIN

  RecentUsers u ON f.Users_id = u.Users_id

JOIN

  dim_brands b ON f.brand_id = b.brand_id

GROUP BY

  b.name

ORDER BY

  total_spent DESC

LIMIT 1;
```

Q6. Which brand has the most transactions among users who were created within the past 6 months?

```
WITH RecentUsers AS (

    SELECT

        Users_id

    FROM

        dim_users

    WHERE

        createdDate >= CURRENT_DATE - INTERVAL '6 months'

)

SELECT

    b.name AS brand_name,

    COUNT(f.Receipt_id) AS transaction_count

FROM

    Fct_receipts f

JOIN

    RecentUsers u ON f.Users_id = u.Users_id

JOIN

    dim_brands b ON f.brand_id = b.brand_id

GROUP BY

    b.name

ORDER BY

    transaction_count DESC

LIMIT 1;
```