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--Q1. What is the total revenue generated by male vs. female customers?
select gender, SUM(purchase_amount) as revenue
from customer
group by gender
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--Q2. Which customers used a discount but still spent more than the
average purchase amount?
select customer_id, purchase_amount
from customer
where discount_applied = 'Yes' and purchase_amount >= (select
AVG(purchase_amount) from customer)
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-- Q3. Which are the top 5 products with the highest average review
rating?
select item_purchased, round(avg(review_rating::numeric),2) as "Average
Product Rating"
from customer
group by item_purchased
order by avg(review_rating) desc
limit 5
```

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--Q4. Compare the average Purchase Amounts between Standard and Express
Shipping.
select shipping_type,
ROUND(AVG(purchase_amount),2)
from customer
where shipping_type in ('Standard','Express')
group by shipping_type;
```

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--Q5. Do subscribed customers spend more? Compare average spend and total
revenue
--between subscribers and non-subscribers.
SELECT subscription_status,
      COUNT(customer_id) AS total_customers,
      ROUND(AVG(purchase_amount),2) AS avg_spend,
      ROUND(SUM(purchase_amount),2) AS total_revenue
FROM customer
GROUP BY subscription_status
ORDER BY total_revenue,avg_spend DESC;
```

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--Q6. Which 5 products have the highest percentage of purchases with
discounts applied?
SELECT item_purchased,
      ROUND(100.0 * SUM(CASE WHEN discount_applied = 'Yes' THEN 1 ELSE 0
END)/COUNT(*),2) AS discount_rate
FROM customer
GROUP BY item_purchased
ORDER BY discount_rate DESC
LIMIT 5;
```

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--Q7. Segment customers into New, Returning, and Loyal based on their
total
-- number of previous purchases, and show the count of each segment.
with customer_type as (
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SELECT customer_id, previous_purchases,
CASE
    WHEN previous_purchases = 1 THEN 'New'
    WHEN previous_purchases BETWEEN 2 AND 10 THEN 'Returning'
    ELSE 'Loyal'
END AS customer_segment
FROM customer)

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select customer_segment, count(*) AS "Number of Customers"
from customer_type
group by customer_segment;

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--Q8. What are the top 3 most purchased products within each category?

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WITH item_counts AS (
    SELECT category,
           item_purchased,
           COUNT(customer_id) AS total_orders,
           ROW_NUMBER() OVER (PARTITION BY category ORDER BY
COUNT(customer_id) DESC) AS item_rank
    FROM customer
    GROUP BY category, item_purchased
)
SELECT item_rank, category, item_purchased, total_orders
FROM item_counts
WHERE item_rank <=3;

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--Q9. Are customers who are repeat buyers (more than 5 previous purchases) also likely to subscribe?

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SELECT subscription_status,
       COUNT(customer_id) AS repeat_buyers
FROM customer
WHERE previous_purchases > 5
GROUP BY subscription_status;

```

--Q10. What is the revenue contribution of each age group?

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SELECT
    age_group,
    SUM(purchase_amount) AS total_revenue
FROM customer
GROUP BY age_group
ORDER BY total_revenue desc;

```