# SQL-Based E-commerce Analysis – Question List

## Customer & Geography Insights

* List all unique cities where customers are located.
* Count the number of customers from each state.

## Order & Product Analysis

* Count the number of orders placed in 2017.
* Calculate the number of orders per month in 2018.
* Find the average number of products per order, grouped by customer city.
* Calculate the percentage of orders that were paid in installments.

## Sales & Revenue Insights

* Find the total sales per category.
* Calculate the percentage of total revenue contributed by each product category.
* Calculate the total revenue generated by each seller, and rank them by revenue.
* Identify the top 3 customers who spent the most money in each year.

## Trends & Growth Metrics

* Calculate the moving average of order values for each customer over their order history.
* Calculate the cumulative sales per month for each year.
* Calculate the year-over-year growth rate of total sales.

## Behavioral & Performance Metrics

* Identify the correlation between product price and the number of times a product has been purchased.
* Calculate the retention rate of customers, defined as the percentage of customers who make another purchase within 6 months of their first purchase.