Brief Insights to Q#1 Online Retail Data

**1. Monthly Revenue Trends:**

* **Bar Chart Insight**: The bar chart provides a clear view of the total monthly revenue over the dataset's time range. This allows you to identify the months with the highest and lowest revenue. For example, if there are significant spikes in revenue for certain months, you can investigate possible seasonal factors or promotions that contributed to the increase.
* **Line Chart Insight**: The line chart helps visualize revenue trends over time. It shows whether revenue is generally increasing, decreasing, or fluctuating. A steady upward trend indicates positive growth, while a downward trend might signal potential issues that need attention.

**2. Revenue Seasonality:**

* By observing the patterns in both the bar and line charts, you can determine if there is any seasonality in the revenue data. For example, if revenue spikes consistently during the holiday months, this might indicate that the business benefits from seasonal shopping trends.

**3. Customer Engagement:**

* Since the analysis excludes null customer IDs, the charts reflect the actual sales performance tied to specific customers. A pattern of increasing monthly revenue could indicate growing customer engagement or a successful marketing strategy.

**4. Sales Consistency:**

* The charts can also highlight periods of inconsistency, where revenue fluctuates significantly from one month to another. Understanding the reasons behind these variations (e.g., product launches, marketing campaigns, or external economic factors) could provide valuable insights for future planning.

**5. Business Growth or Decline:**

* By comparing the revenue at the start and end of the period, you can assess whether the business has grown or declined over time. If the trend shows significant growth, this might indicate successful product or service performance. On the other hand, a decline may suggest that the company should investigate potential issues like customer attrition or market saturation.