**Q1. The CEO of retail store is interested in viewing time series for revenue for the entire year, wants to view seasonal trends and why they occur. All of this will help him for forecasting for next year**

Ans: Line chart.

A line chart is used to show trends over time or categories. The category, which is time here, is always displayed horizontally(X-axis) and value vertically(Y-axis).

The line chart would allow the CEO to visualize significant data shifts, such as seasonality or cyclical patterns, enhancing revenue comprehension and improving forecasting capabilities.

**Q2: CMO-> Top 10 countries which are generating highest revenue. Additionally, as subcomponent they also want to view which products are contributed to total revenue generated by each country. Which visual for revenue of each country and breakdown by products on single chart?**

Ans: A stacked bar chart would be used here as the chart allows users to compare subcomponent pieces across different categories. The height or length of the bars will represent the total revenue generated by each country.

Each bar will be divided into the products sold, where the major portion will be allocated to the products that are generating more revenue. This will allow the CMO to view the total revenue data as well as the revenue for each individual product.

**Q3: The CEO wants to see how much average revenue is generated by each country. They want to view following metrics on visual: Minimum value, First Quartile value, Median value, Third Quartile value, Maximum value.**

Ans: Box plot.

The box plot would show the distribution of data based on a five number summary (“minimum”, first quartile, median, third quartile, and “maximum”).

Boxplots are used to graphically demonstrate the locality, spread and skewness groups of numerical data. By using the boxplot, we can easily spot outliers and the distribution of the plot.

**Q4: CMO wants to view top 10 customers by revenue. They are interested in visual that shows greatest revenue generating at start and gradually declines to lowest revenue generating customers. The CMO wants to target highest revenue generating customer and ensure that they stay satisfied with their products**

Ans: Column chart.

Column charts are used to display comparisons between different items. Alternatively, you can view a comparison of items over time.

In this case, the column chart would display the top 10 customers who are contributing the most to revenue. The first bar on the left would be the longest one and would display information for the customer who bought the most goods from the online store. The revenue contributed by each customer would gradually decline as the bars move to the right.

**Q5: CEO is looking to gain insights on demand for their products. They want to look at all countries and see which regions have the greatest demand for their products.** **Once CEO gets an idea of the regions that have high demand, they will initiate an expansion strategy which will allow the company to target these areas and generate more business from these regions. He wants to view the entire data on single view without the need to scroll or hover over the data points to identify the demand.**

**Which visual to demand in each region?**

Ans: Map chart.

The map chart will have all the countries on a single map and the demand will be displayed by highlighting the area of each country.

Dark highlights would mean that the countries have high demand for products whereas the countries that are highlighted light colour are the ones that have low demand.