# EDA Interview Questions & Answers (Seaborn)

**Q:** What is Exploratory Data Analysis (EDA)?

**A:** EDA is the process of analyzing data using statistics and visualizations to discover patterns, trends, and anomalies before modeling.

**Q:** Why is EDA important in industry projects?

**A:** EDA helps identify missing values, outliers, feature relationships, and supports informed business decisions.

**Q:** What is the difference between univariate and bivariate analysis?

**A:** Univariate analysis focuses on a single variable, while bivariate analysis studies the relationship between two variables.

**Q:** When do you use a scatter plot?

**A:** Scatter plots are used to identify relationships between two numerical variables.

**Q:** What insight does a histogram provide?

**A:** It shows the distribution and frequency of a numerical variable.

**Q:** Difference between histogram and KDE plot?

**A:** Histogram shows frequency using bars, while KDE shows a smooth probability density curve.

**Q:** Why are bar plots important in business dashboards?

**A:** They clearly compare aggregated values like average sales or total revenue.

**Q:** What information does a box plot provide?

**A:** It shows median, quartiles, range, and detects outliers.

**Q:** What does a violin plot show?

**A:** It combines box plot statistics with full data distribution.

**Q:** What is a correlation heatmap?

**A:** It visualizes the strength and direction of relationships between numerical features.

**Q:** What is multicollinearity?

**A:** When two or more features are highly correlated and provide redundant information.

**Q:** Why is EDA important before machine learning?

**A:** It prevents wrong assumptions, improves feature selection, and increases model accuracy.

**Q:** How do you explain EDA to non-technical stakeholders?

**A:** EDA helps understand what the data is saying before making decisions.