

# EDA Checklist

## **1. Import necessary libraries**

→ Pandas, NumPy, Matplotlib, Seaborn

## **2. Load the dataset**

→ Use `pd.read_excel()` or `pd.read_csv()`

## **3. View first few rows**

→ `df.head()`

## **4. Check shape and structure**

→ `df.shape`, `df.info()`

## **5. Check for missing values**

→ `df.isnull().sum()`

## **6. Identify and remove duplicates**

→ `df.duplicated().sum()`, `df.drop_duplicates()`

## **7. Summary statistics**

→ `df.describe()`

## **8. Analyze categorical columns**

→ `df['Column'].value_counts()`

## **9. Visualize distributions**

→ Histograms, boxplots, countplots

## **10. Correlation matrix**

→ `df.corr()` and Seaborn heatmap

## **11. Time-based analysis**

→ E.g., Monthly or weekly sales trends

## **12. Grouping and aggregation**

→ Top-selling products, revenue by country, etc.

## **13. Save cleaned dataset**

→ Use `df.to_csv()`

## **14. Document insights and observations**

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## **Recommended Visualizations**

Histogram or KDE plots for distributions

Bar chart of top-selling products

Line chart for sales trends

Revenue by country

Heatmap for correlation matrix