# P06 Student Instructions – Simple Charts

**Objectives:** - Create basic bar, line, and histogram charts - Understand when to use each chart type - Compare multiple data series on a single chart

**Prerequisites:** Fundamentals of chart creation **Estimated Time:** 2 hours **Learning Outcomes:** - Generate bar charts to compare categories - Plot line charts to show trends - Create histograms to visualise distribution - Choose appropriate charts based on data

**Dataset Description:** | Column | Type | Description | |——-|——|————-| | Category | object | Synthetic column | | Value1 | float64 | Synthetic column | | Value2 | float64 | Synthetic column |

**Tasks and Steps:** 1. Load the dataset containing Category, Value1, and Value2 2. Create a bar chart to compare the average Value1 across categories 3. Plot a line chart of Value2 to demonstrate its trend over observations 4. Generate a histogram for Value1 and comment on its distribution 5. Summarise observations in the report

**Formulas / Methods:** - Average by category: (rac{Value1}{})

**Submission Checklist:** - Bar chart image for Value1 - Line chart image for Value2 - Histogram image for Value1 - Written analysis of chart insights

**मराठी सारांश (Marathi Summary):** या प्रात्यक्षिकात आपण साधे बार, रेषीय आणि हिस्टोग्राम चार्ट तयार करू आणि कोणत्या प्रकारची माहिती कोणत्या चार्टने नीट दर्शविली जाते ते समजू.