



Python Data Dive Activities Unit 2.2

1. Line Chart for Temperature Trend: Using Matplotlib, create a line chart illustrating the temperature trend over the last decade. How would you customize this chart to enhance its clarity and aesthetics?

Dataset: kaggle.com/datasets/ecboxer/nyc-weather

2. Bar Chart for Sales Comparison: Generate a bar chart comparing sales data for different products. Justify your choice of a bar chart and discuss how you would customize it for effective communication.

Dataset: kaggle.com/datasets/lakshmi25npathi/online-retail-dataset

3. Scatter Plot for Exam Scores: Create a scatter plot using Matplotlib to visualize the correlation between math and science scores. How would you incorporate color encoding to represent a third variable, and what insights can be drawn from the plot?

Dataset: kaggle.com/datasets/thedevastator/higher-education-predictors-of-student-retention

4. Histogram and Density Plot for Exam Scores Distribution: Using Matplotlib, construct a histogram and a density plot to visualize the distribution of exam scores. What customization options would you employ to enhance the visual representation?

Dataset: kaggle.com/datasets?tags=11105-Education