**Day 7 — 27 June 2025 (Friday)**

**Topic: Data Visualization using Matplotlib**

Today we learned how to visualize data trends and patterns using Matplotlib. Data visualization helps identify spam word frequency, dataset imbalance, and model performance trends. We practiced drawing line charts, bar graphs, histograms, and pie charts. The trainer explained the role of visualization in understanding ML data distribution before feeding it into models.

import matplotlib.pyplot as plt

plt.bar(["Spam","Ham"], [450,1200])

plt.title("Email Dataset Distribution")

plt.show()