**Day 14 — 8 July 2025 (Tuesday)**

**Topic: Training Spam Classifier using Naïve Bayes**

Today we applied yesterday's theory and trained our model using **Multinomial Naïve Bayes**. The dataset was preprocessed, vectorized (TF-IDF), and split into train/test. Model training was quick and efficient. We tested accuracy and predictions on sample email text and saw correct classification. I understood how training time is minimal compared to deep learning, making NB ideal for lightweight systems.

**Code Practiced:**

from sklearn.naive\_bayes import MultinomialNB

model = MultinomialNB()

model.fit(X\_train, y\_train)

y\_pred = model.predict(X\_test)