

Classroom Assignment <5>: Histogram – Test Duration Distribution

Learning Objective:

Learn how to create a **histogram** in Matplotlib to analyze the distribution of test durations.

Expected Completion Time:

Best Case: 15 minutes

Average Case: 20 minutes

Assignment Details:

Create a Python script named **matplotlib_test_histogram.py** that:

1. Store execution times of 12 test cases:
2. [12, 15, 20, 18, 22, 30, 25, 16, 19, 28, 24, 14]
3. Plot a histogram with **bins=5**.
4. Add chart title: "Distribution of Test Execution Times".
5. Add axis labels:
 - o X-axis = "Duration (seconds)"
 - o Y-axis = "Number of Test Cases"

Hints to Solve:

- Use `plt.hist(values, bins=5, color='skyblue', edgecolor='black')`.
- More bins = more detailed distribution.

Expected Outcome:

- A **histogram** showing how many test cases fall within different duration ranges.