

AYTS 5001 – Lab 7: Data Visualisation

Duration: 2 hours | Marks: 6 | Submission: GitHub repo (.ipynb + PDF)

Dataset: malazan_commander_stats.csv

Tasks

1 — Bar Chart (1 mark)

Create a **bar chart** showing Battles_Won per commander.

Requirements:

- x-axis = Commander
- y-axis = Battles_Won
- Title + axis labels

2 — Histogram (1 mark)

Plot a **histogram** of Avg_Casualty_Rate_%.

Markdown responses:

- Which commander has the highest casualty rate?
- What strategic inference can you make?

3 — Scatter Plot by Faction (2 marks)

Campaigns (x) vs Battles_Won (y)

Plot **each faction separately** so a **legend appears**.

Use groupby + scatter plotting pattern.

4 — Box Plot (1 mark)

Plot a **box plot** of Avg_Casualty_Rate_%.

Markdown:

Comment on spread & risks of different commanders.

5 — Line Chart (1 mark)

Sort by Campaigns, then plot a **line chart** showing Campaigns per commander.

Requirements:

- Sorted values
- Clear axis labels + title

Submission

Submit your Jupyter Notebook (.ipynb) to your github.