Hands-On Activity #6:
Student Competition: Create the Worst Graph

Objective
To gain familiarity with plotting software (e.g., ggplot2) while having fun exploring the concept of poor data visualization through the creative challenge of making intentionally bad graphs.

Data
- **Source:** Students can use any data they wish.
- **Suggestion:** Use built-in datasets in R (e.g., `mtcars`, `iris`, `diamonds`).

Tasks
1. **Be creative (30 minutes):**
   - Use the data of your choice to create a graph that intentionally incorporates common data visualization mistakes. Think about how to make the graph misleading or difficult to interpret.
2. **Present your graph:**
   - Each student will present their graph to the class, explaining why it is ineffective or "bad." Focus on the specific mistakes made and how they impact the graph's clarity and accuracy.
   - Use no more than 2 minutes of time.
3. **Vote:**
   - After all presentations, students will vote on which graph they think is the worst.
   - The winner gets a prize and bragging rights.

Deliverables
- A PNG image of the worst graph created.
- A reproducible Jupyter notebook containing the code used to generate the graph.

Tips
- Close your eyes.
- Think about what you like to see in a graph and do the opposite.
- There are many ways to create a bad graph, so be creative!

Tools
- Students are encouraged to use `ggplot2` (using the previous tutorial as inspiration).
- Alternatives include `plotnine` (Python) and `seaborn` (Python).