Wrangling practice

Include both code and output for all problems. Data frames should be displayed using `gt::gt` whenever possible. Add descriptive alt text to all plots. Always consider the meaning and context of your variables and design your output for maximum clarity.

Problems 1-3 refer to the `astronauts` data set, available on Moodle, which includes information about all humans that had traveled to space as of 2019.

Problem 1

Obtain rankings of the five astronauts with the most total EVA (extra-vehicular activity) hours. Generate an attractive horizontal bar chart of the results.

Problem 2

What are the top five occupations of astronauts? Compute the minimum, median, and maximum ages of astronauts in each of these roles. Also include the total number of times astronauts have had these occupations.

Problem 3

Are civilians less likely to put in EVA hours than military members? Has this changed over time? Obtain a single data frame showing total EVA hours for each year and military/civilian status. Rather than printing the entire thing in your document, create a neat table showing the first 10 rows only. Use the complete table to generate a relevant line plot.

Problem 4

Revisit the `scooby` data set. Explore the relationship between `setting_terrain` and one or more other variables in the set until you find something that might be interesting. Include a plot, a numerical summary (like a table), and a short paragraph explaining your findings.