Practical 2: Analyse the Ramen Data

This dataset rates various types of ramen based on the brand, variety, style, and country that sells it.

For every question, create a markdown block for the question number (Question 1, Question 2 and so on).

Directly underneath the markdown for a specific question, create a Python code block and enter the code for your answer into the code block.

Answer all questions with appropriate code.

The dataset name is ramen-ratings.csv and it is provided as a download on the learn site.

Questions

- 1. Create a folder named PRT2030_Practical_2 in a location this is fully under your control.
- 2. Copy the dataset (ramen-ratings.csv) into the folder.
- 3. Open the folder in your IDE of choice (either JupyterLabs or VS Code), and create a new notebook file inside the folder named **Practical_2.ipynb**.
- 4. Read the data from the CSV file into a DataFrame named df_ramen and display the first five rows.
- 5. Display the first five rows of data.
- 6. Display the last five rows of data.
- 7. Display statistical information for the numeric columns using the **describe()** method.
- 8. Display the number of unique values for each column.
- 9. Display only rows where the country is Vietnam.
- 10. Display only the Brand and Style columns.
- 11. Display only the Country column.
- 12. Display the data after it has been sorted by the Stars column from high values to low values.
- 13. In the Country column, replace "USA" with "United States". Make sure this change is saved in the DataFrame, and then display the first five rows to be sure the change was made correctly.
- 14. How many countries are represented in the data?
- 15. Which three countries have the highest average rating?
- 16. Which three countries have the lowest average rating?
- 17. Which three countries have the most brands, and how many brands does each of these countries have?