Quiz Review Guide (March 4)

Please review the following topics:

Jupyter Notebook

- How to run the current cell (including keyboard shortcuts)
- The difference between **Markdown cells** and **Code cells**

GitHub

- Basic commands:
    - `git add`
    - `git commit`
    - `git push`
    - `git clone`
- Branching:
    - How to create a new branch
    - How to switch to another branch

Python

- Basic syntax:
    - Indentation
    - Defining variables
    - List, tuple, dict
    - Arithmetic operations
- File handling:
    - Different file modes (`r`, `w`, `a`, etc.)
    - Reading and writing files
    - Using the `csv` module

Pandas

- Creating a **Series** and a **DataFrame**
- Appending a new row to an existing DataFrame
- Types of problematic data (missing values, duplicates, incorrect formats, outliers etc.)
- Removing or replacing missing values
- Removing duplicates
- Using the `head()` function
- Filtering rows

- Reading from and writing to CSV and Excel (`.xlsx`) files

NumPy

- Creating arrays using:
    - `empty()`
    - `zeros()`
    - `ones()`