

Quiz Review Guide

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()`