**Week 1 Report**

During Week 1, I focused on the initial setup, exploration, and cleaning of Statistics Canada income datasets. My original project scope included exploring both financial wellbeing and mental health resilience, but as I began working with real data, I realized that the analysis is much more complex and time-consuming than I anticipated.

To build a solid foundation, I decided to slow down and focus deeply on data cleaning, understanding statistical indicators, and learning the technical aspects of working with data in Python using Pandas.

This adjustment allowed me to learn key skills properly instead of rushing through the process.

Work Completed

1. Project setup

Created project structure with organized folders.

Initialized GitHub repository and version control workflow.

Downloaded and reviewed relevant datasets from Statistics Canada.

2. Data exploration and cleaning

Imported and explored the 2000–2023 income dataset.

Renamed columns for clarity and checked for missing values and data types.

Filtered out unnecessary measures (e.g., couple vs. one-parent families).

Practiced working with .unique(), .isin(), and .rename() methods in Pandas.

Documented each cleaning step and reasoning in a Python script (01\_check\_income\_data\_2000\_2023.py).

3. Learning focus

Strengthened understanding of Pandas syntax and data transformation workflows.

Scope Revision

Originally, the project aimed to connect income trends, cost of living, and mental health outcomes. However, I realized that combining socioeconomic and health indicators would require complex merging and time alignment across many datasets.

To ensure I can complete a clean and meaningful analysis within the timeframe, I revised the focus to:

“How have incomes in Canada changed from 1976 - 2023, and have they kept up with the cost of living?”

This refined scope allows me to:

Concentrate on real vs. nominal income, gender wage gap, and rent/inflation trends.

Develop a strong, data-driven analysis.

Leave the mental health dimension for a potential future extension or post-graduation research project.

Next Steps (Week 2 Plan)

Clean and explore remaining datasets.

Start visualizing long-term income trends using Matplotlib.

Draft Week 2 progress summary and early analysis plots.

Summary

Week 1 focused on foundations: learning, cleaning, and restructuring the project plan.

By narrowing my scope, I now have a realistic and meaningful direction: analyzing income growth vs. cost of living to assess Canadians’ financial wellbeing over time.