## Exercise 4: Build an Interactive Rental Yields Calculator Using Claude

## Objective:

You will use Claude to design and build an interactive Rental Yields Calculator based on example Excel data.

You will prompt Claude to help you build the calculator and plan how data uploads and updates could work in a real-world project.

## Example Excel Fields:

(Fields from your sample data might include:)

1. Property Name
2. Property Value (GBP)
3. Monthly Rent (GBP)
4. Annual Rent (GBP)
5. Years
6. Annual Growth Rate (%)
7. Yield (%)

## Example Prompts to Use with Claude:

Prompt 1:

“Based on the following fields — Property Price, Monthly Rent, Annual Rent, Rental Yield, Location, Property Type — help me design an interactive calculator for Rental Yields.”

Prompt 2:

“Suggest how I could allow users to upload new property data via an Excel or CSV file and automatically update the calculator.”

Prompt 3:

“Build the logic needed to recalculate Rental Yields when property data is updated.”

Prompt 4:

“Explain different methods I could use to make the calculator interactive — for example, using a simple web app, a Colab notebook, or another method.”

Prompt 5 (optional, advanced):

“Create a basic prototype in Python that allows me to upload a CSV file, calculate rental yields, and download the updated results.”

## Things to Consider:

1. How would you structure the user flow (upload, calculate, download)?
2. How would you ensure data validation (making sure numbers are correctly entered)?
3. How could Artifacts (in Claude) help keep the generated code organized?

### Key Skills practiced

1. Practicing structured prompting to get Claude to assist in building applications.
2. Understanding how to plan data-driven calculators using AI tools.
3. Learning about dynamic data updates through user uploads.
4. Seeing how different delivery methods (Colab, web app, etc.) suit different needs.
5. Applying real-world modelling techniques in a practical and interactive way.
6. Improving critical thinking when designing AI-assisted workflows.