

Part 5B - Excel Automation and Analysis Using ChatGPT Scripts

Yahya Nazer

2026.06.18

Table of contents

Part 5B - Excel Automation and Analysis Using ChatGPT Scripts	1
Chapters	1
Purpose	1
Standard Workflow	1
Chapter 5 - Writing Excel Files	1
Chapter 6 - Excel File Selection GUI	2
Chapter 7 - Excel Viewer	2
Chapter 8 - Excel Statistics	2
Part 5B Review	3
Looking Ahead	3

Part 5B - Excel Automation and Analysis Using ChatGPT Scripts

Chapters

- 5. Writing Excel Files
- 6. Excel File Selection GUI
- 7. Excel Viewer
- 8. Excel Statistics

Purpose

Learn how to use ChatGPT to generate Python programs that create, analyze, and display Excel data.

Standard Workflow

Business Problem → ChatGPT Script → Generated Python Program → Test → Improve Script → Improve Program

Chapter 5 - Writing Excel Files

Program: Write-Excel.py

Topics:

- pandas DataFrame
- to_excel()
- openpyxl
- Multiple worksheets
- Formatting basics

Example Tasks:

- Create Employees.xlsx
- Create Sales.xlsx
- Save reports to C-Results

Chapter 6 - Excel File Selection GUI

Program: Select-Excel-File-GUI.py

Features:

- Select Excel file
- Display selected path
- Log window
- Status messages
- Mac-friendly GUI

Topics:

- tkinter
- filedialog
- labels
- buttons

Chapter 7 - Excel Viewer

Program: Excel-Viewer.py

Features:

- Select Excel file
- Display worksheet names
- Show row count
- Show column count
- Display sample records

Topics:

- pandas
- openpyxl
- tkinter

Chapter 8 - Excel Statistics

Program: Excel-Statistics.py

Features:

- Row count
- Column count
- Missing values

- Unique values
- Numeric summaries

Statistics:

- Minimum
- Maximum
- Average
- Median

Part 5B Review

Skills Checklist

- Write Excel files
- Use openpyxl
- Build Excel GUI tools
- Display workbook information
- Generate statistics
- Improve ChatGPT scripts

Looking Ahead

Part 5C covers:

- Data Validation
- Data Cleaning
- Combining Excel Files
- Excel Reports