Learner Name

LEOPOLD BUNZA MUTERO

1. Did you use any AI tool(s) to assist with this assignment?

◯ No. Why not?

YES

◉ Yes. List the AI tool(s) you used and briefly describe the purpose for which you used the tool(s). *(e.g., brainstorming, research, drafting content)*

AI Tool: Claude (Anthropic's Claude Sonnet 4.5)

Specific Purposes:
• Code Generation: Complete Python implementation including data import, dictionary processing, employee lookup function, and CSV/zip export functionality
• Error Handling: Comprehensive exception handling for FileNotFoundError, ValueError, TypeError, IOError, and PermissionError scenarios

2. To demonstrate effective AI use, please provide your initial prompt(s) and a brief description of the steps you took to refine and iterate on the AI's output for this

Initial Prompt:
I provided Claude with the instructions then requested: "Follow these steps to complete the assignment: [listed all 6 tasks including data import, employee function creation, dictionary processing, error handling, CSV export with zip, and R script for unzipping]"
Refinement and Iteration Steps:
1. Requirement Verification
   - Reviewed generated Jupyter notebook against assignment description
   - Confirmed all 6 tasks were addressed: data import, employee function, dictionary processing, error handling, CSV export/zip, and R script
   - Verified code completeness and functionality

2. Error Handling Review
   - Examined error handling implementation for comprehensiveness
   - Validated coverage of FileNotFoundError, ValueError, TypeError, IOError
   - Confirmed graceful error messages and user-friendly output

3. List at least one source you consulted to verify the AI-generated content in your work.

• Python Official Documentation (https://docs.python.org/3/) - Verified syntax for exception handling and list operations

• R Documentation (https://www.r-project.org/help.html) - Confirmed R syntax for data frame operations and loop structures

• GeeksforGeeks Python Exception Handling guide - Cross-referenced exception handling best practices

• Stack Overflow discussions on Python-to-R code conversion - Validated translation accuracy