Homework Grading Report

Student Name:	Kathryn Emerick
Assignment:	Assignment 1 - Introduction to R
Graded On:	September 27, 2025 at 09:36 PM
Final Score:	34.5 / 37.5 points (92.0%)

Score Summary

Overall Performance: Excellent (92.0%)

Instructor Assessment

Kathryn, this is an excellent first assignment! You demonstrate a strong understanding of the fundamental concepts of data analysis and R programming. Your ability to reflect on the data and the analytical process is particularly impressive. Your responses to the reflection questions are thoughtful, insightful, and demonstrate a genuine desire to learn. Keep up the great work! I am confident that you will continue to excel in this course. Focus on expanding your data preprocessing toolkit and exploring different visualization techniques to further enhance your analytical skills.

Reflection & Critical Thinking

• Kathryn demonstrates a strong ability to reflect on the data and the analytical process. Her responses to the reflection questions are thoughtful and demonstrate a good understanding of data quality, potential issues, and the readiness of each dataset for analysis. She correctly identifies the potential need to account for outliers in the sales data and the challenges associated with text data in the comments data. Her self-assessment is realistic and insightful.

Analytical Strengths

• Kathryn successfully imported and inspected the datasets using R. She accurately identified the data types of key columns and recognized the importance of data quality. Her observations about the range of values in the 'Amount' column and the varying lengths of comments are astute. The code implementation is clean and functional, demonstrating a solid grasp of basic R commands for data manipulation and inspection.

Business Application

• Kathryn understands the practical implications of data quality for business analysis. She correctly points out that clean data is essential for accurate insights and that outliers need to be considered. Her understanding of the different datasets' readiness for analysis demonstrates an ability to prioritize analytical efforts based on data quality and relevance.

Learning Demonstration

• The responses to the reflection questions clearly demonstrate Kathryn's learning. She has grasped the importance of data quality, data types, and the challenges associated with different types of data (numerical vs. text). Her ability to articulate these concepts and apply them to the given datasets is commendable. She also shows an understanding of the importance of data organization for future analysis and collaboration.

Areas for Development

• While Kathryn correctly identifies potential issues, future assignments could benefit from exploring specific techniques for addressing these issues. For example, she could investigate methods for outlier detection and handling, or text preprocessing techniques for the comments data. Further exploration of data visualization techniques to support her observations would also be beneficial.

Recommendations for Future Work

• Continue to focus on developing your data preprocessing skills. Explore different techniques for handling missing values, outliers, and text data. Practice using data visualization tools to communicate your findings more effectively. Actively seek opportunities to apply your analytical skills to real-world business problems. Continue to prioritize thoughtful reflection on your analytical process to deepen your understanding and improve your skills.

Technical Analysis

Code Strengths:

• Successfully imports and explores multiple data sources (CSV and Excel).

• Demonstrates good use of base R functions for data inspection (head, str, summary).

• Code is well-commented and organized with clear sectioning.

• Shows understanding of basic data exploration techniques appropriate for an introductory course.

Code Improvement Suggestions:

• Consider using `read_csv()` and `read_excel()` directly without setting the working directory explicitly to make code more portable across different environments.

• Use consistent naming conventions (e.g., avoid mixing snake_case with camelCase in variable names).

• Add a brief explanation or comment on what each inspection step reveals about the data for better business context.

Technical Observations:

• The student has demonstrated solid foundational skills in importing and exploring datasets using R. The code is clean, readable, and largely functional.

• There's good attention to detail with multiple data inspections (structure, summary statistics), which shows an understanding of exploratory data analysis principles.

• Minor improvements could be made by reducing redundancy in repeated inspection steps for different data frames, possibly through functions or loops if introduced later in the course.

Performance by Category