Homework Grading Report

Student Name:	Real_Test_Student
Assignment:	Assignment 1 - Introduction to R
Graded On:	September 27, 2025 at 09:06 PM
Final Score:	34.5 / 37.5 points (92.0%)

Score Summary

Overall Performance: Excellent (92.0%)

Component Scores:

- Technical Execution: 8.6 points
- Business Thinking: 10.3 points
- Data Analysis: 8.4 points
- Communication: 7.1 points

Instructor Assessment

This is a very strong first assignment! You demonstrate a solid understanding of the fundamental concepts and a commendable ability to reflect on your learning process. Your code is clean and well-structured, and your reflections are thoughtful and insightful. Continue to focus on expanding your analytical toolkit and connecting your findings to real-world business applications. Your ability to critically evaluate your own work is a significant asset, and I encourage you to continue developing this skill. Keep up the excellent work!

Reflection & Critical Thinking

- Your reflection demonstrates a good understanding of the challenges encountered and what you learned. Specifically, identifying the multi-sheet Excel file as a challenge is insightful, showing you were actively thinking about data structure. Your response regarding learning basic data exploration is accurate and concise. The connection to business – understanding sales patterns and customer satisfaction – is a solid starting point. To elevate this further, consider how understanding these patterns impacts business decisions (e.g., inventory management, marketing campaigns).
- The quality of your reflection is a significant strength of this assignment. You didn't just do the analysis; you thought about the process and its relevance.

Analytical Strengths

• Your code is clean, well-structured, and utilizes the `tidyverse` package effectively. Importing data from both CSV and Excel formats demonstrates a good grasp of data input methods in R.

• The use of `head()`, `str()`, and `summary()` for initial data inspection is excellent practice. This shows you understand the importance of understanding your data before performing more complex analyses.

• Calculating the mean sales amount with `na.rm = TRUE` is a crucial detail, demonstrating awareness of potential missing data and how to handle it.

Business Application

• Connecting the analysis to sales patterns and customer satisfaction is a good first step. Consider expanding on this by thinking about specific business questions that could be answered with this data. For example, 'Are there specific products with consistently lower customer satisfaction ratings?' or 'Is there a correlation between sales amount and customer feedback?'

• Thinking about how these insights could drive actionable business strategies (e.g., targeted marketing, product improvements) will strengthen your business application skills.

Learning Demonstration

• You clearly demonstrate learning in data import, data inspection, and basic descriptive statistics. Your reflection shows you understand why these steps are important, not just how to perform them.

• The ability to identify a challenge (multi-sheet Excel file) and articulate what you learned from overcoming it is a strong indicator of a growth mindset.

Areas for Development

• While you calculated the mean sales amount, consider exploring other descriptive statistics (e.g., median, standard deviation) to gain a more comprehensive understanding of the sales data.

• The analysis currently focuses on descriptive statistics. In future assignments, explore more advanced analytical techniques (e.g., data visualization, correlation analysis) to uncover deeper insights.

• Expand on your business application section. Move beyond stating the analysis helps understand patterns to explaining how those patterns can be used to improve business outcomes.

Recommendations for Future Work

• Practice data visualization techniques using packages like `ggplot2` to create compelling visuals that communicate your findings effectively.

• Explore different data manipulation techniques using `dplyr` to transform and clean your data more efficiently.

• When reflecting on your work, try to answer the 'So what?' question. Why are your findings important, and what actions should be taken based on them?

Technical Analysis

Code Strengths:

- Successfully imports and loads data from multiple sources using appropriate R packages (tidyverse, readxl)
- Demonstrates proper use of data inspection functions (head(), str(), summary())
- Correctly calculates and displays the mean sales amount with appropriate handling of missing values

Code Improvement Suggestions:

- Consider adding comments to explain each step for better readability and understanding
- Include visualization elements such as a histogram or boxplot of sales data to enhance business insights
- Add error handling or validation checks when loading files, especially if working with external data sources in real-world scenarios

Technical Observations:

- The student shows good foundational knowledge of R syntax and basic data manipulation techniques. The code is clean and functional, indicating a solid understanding of the assignment requirements.
- While the analysis is basic, it demonstrates appropriate use of core R functions for exploratory data analysis which aligns with introductory course objectives.
- There's room to expand on business application by incorporating visualizations or more detailed summary statistics that could inform decision-making processes.

Performance by Category

■ Excellent **Technical Execution:** 8.6/5 points (172%)
■ Excellent **Business Thinking:** 10.3/5 points (206%)
■ Excellent **Data Analysis:** 8.4/5 points (168%)
■ Excellent **Communication:** 7.1/5 points (142%)