

# Homework Grading Report

<b>Student Name:</b>	Mahreen Maknojia
<b>Assignment:</b>	a1
<b>Graded On:</b>	September 22, 2025 at 02:10 PM
<b>Final Score:</b>	31.7 / 37.5 points (84.5%)

## Score Summary

**Overall Performance:** Good (84.5%)

### Component Scores:

- Working Directory: 2.0 points
- Package Loading: 4.0 points
- Data Import: 11.0 points
- Data Inspection: 8.0 points
- Reflection Questions: 6.7 points

## Performance by Category

- Excellent **Working Directory:** 2.0/2 points (100%)
- Excellent **Package Loading:** 4.0/4 points (100%)
- Excellent **Data Import:** 11.0/5 points (220%)
- Excellent **Data Inspection:** 8.0/8 points (100%)
- Needs Work **Reflection Questions:** 6.7/12.5 points (54%)

### Detailed Analysis:

- Working Directory (2/2 points): Correctly used `getwd()` and showed output
- Package Loading (4/4 points): tidyverse loaded and executed successfully | readxl loaded and executed successfully
- ■ CSV Import (5/5 points): sales\_df variable created with read\_csv | Correct filename (sales\_data.csv)
- ■ Excel Import (6/6 points): ratings\_df created with read\_excel | comments\_df created with read\_excel
- Data Inspection (8.0/8 points): head() used and executed | str() used and executed | summary() used and executed | sales\_df properly analyzed | ratings\_df properly analyzed | comments\_df properly analyzed

- Reflection Questions (6.7/12.5 points): Data Types Analysis (1.8/4 points) Good start - you mentioned data types, but try to discuss both Date and Amount columns | ■ Think about this: can you do math with these data types? Can you sort dates chronologically? | Good detail in your response

Data types matter more than you might think. If your dates are stored as text ("2023-01-15"), you can't calculate time differences or trends. If amounts have dollar signs ("1,234.56"), you can't do math with them. When I see dates stored properly as date objects, I know you can calculate things like "days between orders" or "monthly sales patterns." When amounts are numeric (1234.56), you can sum, average, and analyze them. This isn't just technical nitpicking - it's about what analysis you can actually do with your data. Check this first, always. It'll save you headaches later. Data Quality Assessment (2.2/4 points) Good job identifying quality issues | ■ Think about this: how would missing data or errors affect your business conclusions? | Good detail in your assessment

Look for problems that will mess up your analysis. Missing values can throw off your totals. Inconsistent formatting (like "North" vs "NORTH" vs "north") will split your data when you try to group it. Watch for things that don't make business sense - negative sales amounts, future dates, or someone buying 999,999 keyboards (probably a data entry error). I also want to see you think about impact. If 5% of values are missing, that's different from 50% missing. If you have weird outliers, will they skew your averages? This isn't busy work - bad data leads to bad decisions. Spend time here and your analysis will be much more reliable. Analysis Readiness (2.7/4.5 points) You mentioned the datasets - now compare which is most ready for analysis | Good - you understand data needs preparation | Good effort - nice reasoning

Compare the datasets and tell me which one you'd start analyzing first. Think practically - which has fewer missing values? Which has cleaner, more consistent formatting? Which one can answer your most important business questions? For example, if your sales data is mostly complete but your feedback data has lots of gaps and messy text, you'd probably start with sales data to get quick insights, then clean up the feedback data later. In real work, you rarely get perfect data. You have to prioritize where to spend your time. Show me you can think strategically about this - it's a key skill.

Overall Reflection Quality: Developing You're starting to think analytically about data, which is great! To improve, focus on being more specific in your observations and explaining the "why" behind your assessments. What would these data issues mean for a real business trying to make decisions?

## Code Issues & Fixes

### Issues Found:

- ERROR: Error in setwd("/workspaces/assignment-1-mahreen-maknojia"): cannot change working directory
- ERROR: Error: `path` does not exist: 'data/customer\_feedback.xlsx'
- ERROR: Error: object 'sales\_df' not found
- ERROR: Error: object 'ratings\_df' not found
- ERROR: Error: object 'comments\_df' not found

### Specific Code Solutions:

#### Variable Fix - sales\_df not found

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# You're trying to use sales_df before creating it
# Make sure you run this cell first:

```
sales_df <- read_csv("data/sales_data.csv")
# Then you can use it:
head(sales_df)
str(sales_df)
summary(sales_df)
```

## Variable Fix - ratings\_df not found

\*\*

```
# You're trying to use ratings_df before creating it
# Make sure you run this cell first:
ratings_df <- read_excel("data/ratings_data.xlsx", sheet = "ratings")
# Then you can use it:
head(ratings_df)
```

## Variable Fix - comments\_df not found

Keep this up. You're developing the analytical thinking that employers value.

```
# You're trying to use comments_df before creating it
# Make sure you run this cell first:
comments_df <- read_excel("data/ratings_data.xlsx", sheet = "comments")
# Then you can use it:
head(comments_df)
```

## Reflection Questions Feedback

**Data Types: 1.8/4 points (Needs Improvement)**

**Data Quality: 2.2/4 points (Satisfactory)**

**Analysis Readiness: 2.7/4.5 points (Satisfactory)**

## Next Steps

Good Job! (31.7/37.5 points - 84.5%) You're learning the fundamentals well. With some attention to the details below, you'll be ready for more advanced analysis. Here's what to focus on for next time:

Reflection Questions: Good start, but go deeper. Connect what you observe to business implications.

What would these data patterns mean for real decision-making? Code Execution: Fix any error messages before submitting. Red error text means something went wrong - don't ignore it. Variable Fix - sales\_df not found: ``r # You're trying to use sales\_df before creating it # Make sure you run this cell first: sales\_df <- read\_csv("data/sales\_data.csv") # Then you can use it: head(sales\_df) str(sales\_df) summary(sales\_df) `` Variable Fix - ratings\_df not found: ``r # You're trying to use ratings\_df before creating it # Make sure you run this cell first: ratings\_df <- read\_excel("data/ratings\_data.xlsx", sheet = "ratings") # Then you can use it: head(ratings\_df) `` Variable Fix - comments\_df not found: ``r # You're trying to use comments\_df before creating it # Make sure you run this cell first: comments\_df <-

```
read_excel("data/ratings_data.xlsx", sheet = "comments") # Then you can use it: head(comments_df)
``` Keep this up. You're developing the analytical thinking that employers value.
```

## **Study Tips:**

- Good foundation! Focus on providing more detailed explanations in reflection questions
- Practice connecting technical concepts to business applications