

# Homework Grading Report

<b>Student Name:</b>	Alexander Weis
<b>Assignment:</b>	a1
<b>Graded On:</b>	September 22, 2025 at 02:15 PM
<b>Final Score:</b>	35.3 / 37.5 points (94.1%)

## Score Summary

**Overall Performance:** Excellent (94.1%)

### Component Scores:

- Working Directory: 2.0 points
- Package Loading: 4.0 points
- Data Import: 11.0 points
- Data Inspection: 8.0 points
- Reflection Questions: 10.3 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%)
- Good **Reflection Questions:** 10.3/12.5 points (82%)

### 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 (10.3/12.5 points): Data Types Analysis (3.8/4 points) Great - you identified both Date and Amount columns | Excellent - you connected data types to business analytics! | Nice effort - you could expand a bit more

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 (3.8/4 points) Excellent - you identified multiple types of data quality issues | Great analytical thinking about impact on analysis | Nice response - you could add more specific examples

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: Good! You're on the right track with your analytical thinking. Your responses show you understand the key concepts, but there's room to go deeper. Try to connect your observations more explicitly to business implications and provide more specific examples from the data.

## Code Issues & Fixes

### Issues Found:

- ERROR: Error in setwd("/workspaces/assignment-1-Alex-Weis4-2"): 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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<pre># You're trying to use sales_df before creating it</pre>
<pre># Make sure you run this cell first:</pre>

```
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: 3.8/4 points (Excellent)**

**Data Quality: 3.8/4 points (Excellent)**

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

## Next Steps

■ Excellent Work! (35.3/37.5 points - 94.1%) Strong work! You're getting comfortable with R and starting to think analytically about data. Your technical execution is solid. Here's what to focus on for next time: 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:**

- Excellent work! Consider exploring additional data analysis techniques
- Try applying these concepts to your own datasets