Homework Grading Report

Student Name:	Chandler Nixon
Assignment:	a1
Graded On:	September 22, 2025 at 02:13 PM
Final Score:	34.2 / 37.5 points (91.1%)

Score Summary

Overall Performance: Excellent (91.1%)

Component Scores:

- Working Directory: 2.0 points

- Package Loading: 4.0 points

- Data Import: 11.0 points

- Data Inspection: 8.0 points

- Reflection Questions: 9.2 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%)
■■ Satisfactory **Reflection Questions:** 9.2/12.5 points (73%)

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 (9.2/12.5 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 (1.6/4.5 points) You mentioned the datasets - now compare which is most ready for analysis | ■ Think about what you'd need to do to make the messiest dataset analysis-ready | 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: '/workspaces/assignment-1-chandlerln87/data/sales_data.csv' does not exist.

- ERROR: Error: `path` does not exist: '/workspaces/assignment-1-chandlerln87/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:

Data Import Fix - CSV File Not Found

**

Working Directory Solutions:
Option 1: If your working directory is set to the data folder:

• Use: read_csv("sales_data.csv") - just the filename
Option 2: If your working directory is the project root:
• Use: read_csv("data/sales_data.csv") - include the data/ folder
Check your setup: Run getwd() to see where you are, then adjust your file paths accordingly.

```
# Check your working directory and file location
getwd() # See where R is currently looking
list.files() # See what files are in current directory
list.files("data/") # See what's in the data folder
# For CSV files, use:
sales_df <- read_csv("data/sales_data.csv")
# NOT: read_csv("../data/sales.csv") or read_csv("sales.csv")
# Make sure:
# 1. File is named exactly "sales_data.csv" (check spelling!)
# 2. File is in a "data" folder in your project
# 3. You're running from the correct working directory
```

Variable Fix - sales_df not found

**

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

Data Quality: 3.8/4 points (Excellent)

Analysis Readiness: 1.6/4.5 points (Needs Improvement)

Next Steps

■ Excellent Work! (34.2/37.5 points - 91.1%) 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: 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. Data Import Fix - CSV File Not Found: ```r # Check your working directory and file location getwd() # See where R is currently looking list.files() # See what files are in current directory list.files("data/") # See what's in the data folder # For CSV files, use: sales_df <- read_csv("data/sales_data.csv") # NOT: read_csv("../data/sales.csv") or read_csv("sales.csv") # Make sure: # 1. File is named exactly "sales_data.csv" (check spelling!) # 2. File is in a "data" folder in your project # 3. You're running from the correct working directory ``` 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