**The R Codes used in the final project along with the R studio Screenshot:**

# Load required packages

library(readxl)

# Read the Excel file into a variable

file\_path <- "C:/Users/Maisha/Downloads/Stock\_MLRAnalysis.xlsx"

Stock\_MLRAnalysis <- read\_excel(file\_path)

# Display the first few rows of the data

head(Stock\_MLRAnalysis)

# Compute and display basic statistics

summary(Stock\_MLRAnalysis)

# Create a histogram for stock\_return\_scaled

hist\_data <- Stock\_MLRAnalysis$stock\_return\_scaled

hist(hist\_data, main = "Histogram of stock\_return\_scaled",

xlab = "Stock Return Scaled", ylab = "Frequency", col = "Dark red")

# Perform a one-sample t-test

t\_test\_result <- t.test(hist\_data, mu = 300)

print(t\_test\_result)

# Simple linear regression with dividend as independent and stock\_return\_scaled as dependent

lm\_model <- lm(stock\_return\_scaled ~ dividend, data = Stock\_MLRAnalysis)

summary(lm\_model)

# Multiple linear regression with all predictors

formula <- "stock\_return\_scaled ~ return + market\_overview + dividend + earnings\_ranking + debt\_to\_equity + marketcap"

mlm\_model <- lm(formula, data = Stock\_MLRAnalysis)

summary(mlm\_model)

A screenshot of a computer

Description automatically generated

**The screenshots of the results from R Studio:**

**A screenshot of a computer

Description automatically generated**

**A screenshot of a computer

Description automatically generated**

**A screenshot of a computer

Description automatically generated**