1.

a. # Replace 'path\_to\_file' with the actual file path if the file is not in the working directory

vinegar\_data <- vinegar

# Boxplot to visualize acidity differences between factory locations

boxplot(vinegar\_data$pH ~ vinegar\_data$Site, data = vinegar\_data,

xlab = "Factory Location", ylab = "Acidity",

main = "Acidity Levels across Factory Locations")A chart of a row of boxes

Description automatically generated

Interpretation

1. Variations in Median and Spread:Higher acidity level observed in Sydney location , lower acidity level observed in New York
2. Spread :Interquartile range highest in new York suggesting higher variability in acidity levels