Instructions for Executing the Provided Code in RStudio

This document outlines the steps required to execute the provided code snippet within the RStudio environment for spam classification analysis.

1. Prerequisites

1.1. RStudio Software: Ensure you have RStudio installed and operational on your system.
1.2. Package Installation: Verify that the necessary R packages are available. You can install them using the install.packages() function within RStudio. The required packages for this code include tm, caret, wordcloud, SnowballC, ggplot2, RColorBrewer, and e1071.

2. Code Execution

2.1. Code Access: You can obtain the code snippet from the designated source (replace "provided source" with the actual source if applicable).
2.2. RStudio Interface: Open RStudio and navigate to the Editor pane.
2.3. Code Input: Paste the acquired code snippet into the active window within the Editor pane.
2.4. Line-by-Line Execution (Optional): For a more controlled execution process, you may choose to execute the code line by line. Place your cursor at the beginning of the first line and press Ctrl + Enter (or Cmd + Return on Mac) to execute that specific line. Repeat this process for each subsequent line of code.

Additional Notes

The code assumes the presence of a CSV file named "spam.csv" within your working directory. Ensure this file exists and contains the relevant data for spam classification.
The code performs various tasks such as data preprocessing, text cleaning, building a document-term matrix, dimensionality reduction, model training (SVM & Naive Bayes), ensemble prediction, and evaluation (accuracy & confusion matrix). The output will provide insights into these individual steps.