APPLICATION  OF SUPPLY CHAIN ANALYTICS ANALYTICS ASSIGNMENT   
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Question 1.

RStudio is an integrated development environment (IDE) for the R programming language that provides a user-friendly interface for working with R. The main components of the RStudio interface are:

1. Source Editor: The source editor where you write code. It has a syntax highlighter, automatic indentation, code wrapping and other features.

2. console: This is where you interact directly with R. You can write commands, check the output, and check for errors.

3. Environment/History/Connection: This panel displays information about your current environment, including objects, data frames, and packages, as well as the history of your commands and database connections you have made.

4. Programs/packages/help: The programs/packages/help panel allows you to view your builds, explore installed packages and their documentation, and access help files.

5. Toolbar: Toolbar provides quick access to frequently used commands and operations, such as running code, saving scripts, and installing packages.

6. File Browser: Navigate to and open Indonesian characters, data files, and other files on your computer using a file browser.

Overall, the RStudio interface is designed to make it easy to build, test, and debug R code, as well as manage data and collaborate on projects with others.

Question 2

(a) In Sundanese, the summary() function is used to obtain statistics of the content of a data frame, matrix, or numeric vector. Display data such as mean, median, minimum, maximum, and quartile.

(b) In Sundanese, the var() function is used to calculate the variance of a vector of numbers or columns in a data frame. Variance determines how far the values ​​in a dataset deviate from the mean.

(c) In Sundanese, the sd() function calculates the standard deviation of a vector of numbers or columns in a data frame. The standard deviation of a database measures the variability or spread.

(d) In Sundanese, the ggplot2() function is used to display data such as graphs, scatterplots, and histograms. This function is part of the ggplot2 package, which provides a versatile and advanced plotting system.

(e) In Sundanese language, the help() function is used to get documentation for Sundanese language functions or packages. You can type help() with the function or package name to learn about the usage, parameters, and examples of the function or package. This function is very useful for learning new functions or editing existing functions.

Question 3

(a) Dplyr is the core package of the Tidyverse R collection that provides R's manipulation and transformation features. Filter rows, select columns, add new variables, group data, and more. have a function. Dplyr has an intuitive and easy-to-read syntax, making it an ideal candidate for data manipulation problems.

(b) Tibble is a Tidyverse package that provides an alternative to standard dataframe objects. Tibbles is more modern and feature-rich than data frames, with higher data type constraints, syntax, and stricter data type constraints. Ideal for research and interactive data analysis.

(c) Reader is a Tidyverse package that provides a fast and efficient way to read data from flat files such as CSV or TSV. Readr is faster, more versatile, and more forgiving than R methods like read.csv(), making it better at handling missing values, date/time formats, and other common data problems.

(d) Sundanese linear model function (lm) in accordance with the linear regression model to the data set shown. After model fitting, the predict() function can be used to generate predictions based on new data. This function is often used in a variety of data analysis applications, from banking to social science.

(e) Since the pass() method is not a core function in Sunda or the Tidyverse package, it is difficult to give a more detailed explanation. However, "fitting" generally refers to the process of estimating parameters in a statistical model. The fit() method can be used to fit regression models, time series, or other statistical models, depending on the situation.