**Introduction to R and RStudio**

The video introduces **R and RStudio**, explaining that R is a statistical programming language used for data processing, analysis, visualization, and machine learning—especially in academia, healthcare, and government. It supports importing data from multiple sources and includes easy-to-use functions and built-in packages.

**RStudio** is highlighted as the main IDE for R, featuring a code editor, console, workspace, and tabs for files, plots, packages, and help resources.

Common **R libraries** include:

* dplyr (data manipulation)
* stringr (string handling)
* ggplot2 (visualization)
* caret (machine learning)

Learners can practice using an **RStudio virtual lab** through Skills Network Labs, which requires no installation. The video concludes by reinforcing R’s capabilities, the RStudio environment, and key libraries for data science.

# Plotting in RStudio

The video “Plotting in RStudio” explains how to create visualizations in R using both built-in functions and popular libraries. It introduces key R visualization packages—**ggplot2**, **Plotly**, **Lattice**, and **Leaflet**—and explains how to install them using install.packages().

Learners are shown how to create basic plots with the plot() function, add lines and titles, and build advanced, layered plots using **ggplot2**. The process includes loading the library, specifying data and axes, and using geom\_point() for scatterplots. Titles and axis labels can be added with ggtitle() and labs().

The lesson also covers **GGally**, an extension of ggplot2 that simplifies creating complex graphics. Overall, the video teaches how to use R’s visualization tools to create clear, informative plots for data analysis.