1. R is a statistical programming language that is powerful for data processing and manipulation, statistical inference, data analysis, and Machine Learning algorithms.
2. R is most used by academics, healthcare, and the government.
3. R has many functions that support importing data from different sources such as flat files, databases, the web, and statistical software like SPSS and STATA.
4. R is preferred by some Data Scientists because it is easy to use the functions within R, and it produces great visualizations and readily available packages to handle data analysis without the need to install any libraries.
5. RStudio is an integrated development environment that helps improve and increase productivity with the R language. It includes a syntax-highlighting editor, a console for typing R commands, a workspace and history tab, and a Plots, Files, Packages, and Help tab.
6. Popular Libraries in the Data Science community include dplyr for manipulating data, stringer for manipulating strings, ggplot for visualizing data, and caret for Machine Learning.

Plotting within RStudio

- R is a great tool for data visualization and has different packages such as ggplot, plotly, lattice, and Leaflet.
- ggplot is a popular and powerful data visualization package for R that allows for adding layers and components on a single visualization.
- To install packages in R, use the install.packages() function.
- In addition to using packages, R also has its own inbuilt functions for creating plots and visualizations, such as the plot() function.
- To create a scatter plot using ggplot, you can call the ggplot function on a dataframe, specify the X and Y axis, and add the geom_point() function to specify that you want a scatter plot.
- You can add titles and tweak the axis names using the ggtitle() and labs() functions in ggplot.