R is data analysis software which is used by analysts, quants, statisticians, data scientists and others.

R Language

- R software is used for basic programming.
- R software is used for data manipulation.
- R software is used for data summary and visualization.
- R software is used for supervised learning model.
- R software is used for un-supervised learning model.
- R software is used for communication
- And many more...

Tools

Software : RIDE : R Studio

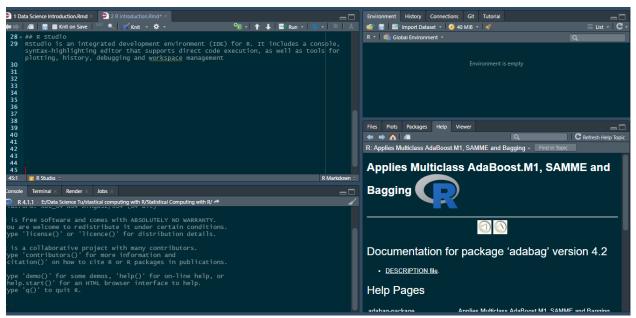
• Packages: Base, tidyverse and many more...

History of R

- First implemented in 1990's by Ross Ihaka and Robert Gentleman at University of Auckland, New Zealand
- Established as an open source project in 1995 by Ross Ihaka
- R project is managed by R core group since 1997
- R 1.0.0 was released in February 2000
- R is closely modeled on the S language for statistical computing conceived by John Chambers, Rick Baker, Trevor Hastie, Allan Wilks and others at Bell Labs in mid 1970s, and made publicly available in 1980s. (But, S and Splus software are commercial!)

R Studio

RStudio is an integrated development environment (IDE) for R. It includes a console, syntax-highlighting editor that supports direct code execution, as well as tools for plotting, history, debugging and workspace management



Rmarkdown

RMarkdown is a reporting tool provided by R. With the help of Rmarkdown, create high quality reports of R code.

The output format of Rmarkdown can be:

- \bullet HTML
- PDF
- WORD