**What is R Programming Language?**

R programming is used as a leading tool for machine learning, statistics, and data analysis. Objects, functions, and packages can easily be created by R.

It’s a platform-independent language. This means it can be applied to all operating systems.

It’s an open-source free language. That means anyone can install it in any organization without purchasing a license.

R programming language is not only a statistic package but also allows us to integrate with other languages (C, C++). Thus, you can easily interact with many data sources and statistical packages.

The R programming language has a vast community of users and it’s growing day by day.

R is currently one of the most requested programming languages in the Data Science job market which makes it the hottest trend nowadays

It was designed by Ross Ihaka and Robert Gentleman at the University of Auckland, New Zealand, and is currently being developed by the R Development Core Team.

R programming language is an implementation of the S programming language. It also combines with lexical scoping semantics inspired by Scheme. Moreover, the project was conceived in 1992, with an initial version released in 1995 and a stable beta version in 2000.

**Features of R Programming Language**

R Packages: One of the major features of R is it has a wide availability of libraries. R has CRAN(Comprehensive R Archive Network), which is a repository holding more than 10, 0000 packages.

Distributed Computing: Distributed computing is a model in which components of a software system are shared among multiple computers to improve efficiency and performance. Two new packages ddR and multidplyr used for distributed programming in R were released in November 2015.

**Statistical Features of R**

Basic Statistics: The most common basic statistics terms are the mean, mode, and median. These are all known as “Measures of Central Tendency.” So using the R language we can measure central tendency very easily.

Static graphics: R is rich with facilities for creating and developing interesting static graphics. R contains functionality for many plot types including graphic maps, mosaic plots, biplots, and the list goes on.

Probability distributions: Probability distributions play a vital role in statistics and by using R we can easily handle various types of probability distributions such as Binomial Distribution, Normal Distribution, Chi-squared Distribution, and many more.

Data analysis: It provides a large, coherent, and integrated collection of tools for data analysis.