



R Programming Language

Part of Future Connect Media's IT
Course

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Topics to be covered

- R Introduction
- R Installing
- R Syntax
- Comments, Variables and Data types in R
- Numbers, Math, Strings, Booleans and Operators in R
- IF, IF Else, Else if and Nested IF in R
- Loops in R
- Functions in R
- Data Structures in R
- Graphics in R
- R Statistics
- Final Project of Data Analysis with R

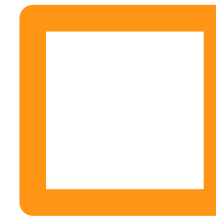


INTRODUCTION TO R

- R is a programming language, It is often used for statistical computing and graphical presentation to analyse and visualize data.
- It is an open-source programming language that is widely used as a statistical software and data analysis tool.
- This language was created in 1993 by two statisticians Robert Gentleman, and Ross Ihaka at the University of Auckland, New Zealand. It has since been ported to practically every operating system and is available at r-project.org.

Why Learn R?

Learning R for data analysis is valuable because it provides a robust environment with powerful statistical tools, versatile data manipulation capabilities, and exceptional data visualization options. R's open-source nature, active community, and extensive packages make it a top choice for data professionals.





Installing R and R Studio

Follow the steps given on next slide.



Steps to Install R

Download R:

Go to <https://www.r-project.org/>
Click on "Download R."

Select a CRAN Mirror:

Choose a location near you.

Download R for Your OS:

Click on the link for your operating system (e.g., Windows, macOS).

Run the Installer:

Open the downloaded file and run the installer.

Installation Options:

Follow the installation instructions, accepting the default settings.

Finish Installation:

Once the installation is complete, you're ready to use R.

Launch R:

Find and open R from your applications or start menu.

Now you have R installed and can use it for data analysis and programming.

Installing RStudio

1. Install R (if not already installed):

1. Before installing RStudio, make sure you have R installed on your computer. You can follow the steps for installing R mentioned earlier if you haven't already.

2. Download RStudio:

1. Visit the official RStudio website at <https://posit.co/download/rstudio-desktop/>.
2. Click on the "Download" button at the top-right corner of the page.

3. Select the Free RStudio Desktop:

1. On the download page, you'll see options for RStudio Desktop and RStudio Server. For most users, RStudio Desktop is the appropriate choice.
2. Click on "Download" under the RStudio Desktop section.

4. Choose the RStudio Installer for Your OS:

1. Select the installer for your operating system (Windows, macOS, or Linux).
2. Click on the download link to initiate the download.

5. Run the RStudio Installer:

1. Once the installer executable file is downloaded, double-click it to run the installer.

6. Installation Options:

1. Follow the installation instructions, which typically involve accepting the default settings.
2. You can choose where to install RStudio, but the default location is usually fine.

7. Finish Installation:

1. After the installation is complete, you will see a message indicating that RStudio has been installed successfully.

8. Launch RStudio:

1. Find and open RStudio from your applications or start menu.
2. The RStudio IDE will open, and you can start using it for R programming and data analysis.



Congratulations You
Have successfully
installed R and R studio
on your System.
Happy Learning

The background features several decorative elements: a large blue circle on the left containing the text 'Thank you'; a purple circle in the top left; an orange L-shaped line in the top right; a teal L-shaped line in the bottom left; and a blue circle with teal curved lines in the bottom center.

Thank you

Future Connect Training Institute

Website: <https://www.fctraining.co.uk/>