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YOUR COURSE, YOUR WAY - MORE EFFECTIVE IT TRAINING

R Programming for Beginners

Duration: 3 days

Overview:

Do you get overwhelmed by complicated lingo and want a course that is easy to follow, detailed and presented to make the process enjoyable?

If so, our â€œR Programming for Beginnersâ€ is THE course for you!

It covers the most essential topics you must learn to begin programming with R.

With more than two million global users, the R language is rapidly turning into a top programming language specifically in the space of data science as well as statistics. What you are going to learn on this course is how to master the fundamentals of the open-source programming language which includes vectors, data frames and lists.

Prerequisites:

No prerequisites are required for this course

Topics:

1 - Introduction

A Brief History of R

What exactly is R Programming

What are the benefits of using R language

2 - Your First R Session

Entering Commands in the Console Window

Performing simple calculations

Using a Function

Storing calculated values

Sourcing a Script

3 - The R Syntax

Expressions

Constants

Arithmetic

Conditions

Function calls

Symbols

Keywords

Naming Variables

4 - Effective use of Functions and Arguments

Ways to vectorize Functions

Passing Arguments to Functions

Making your code plain and readable

5 - Packages

Finding R Packages

Installing a Package

Loading and unloading Packages

6 - Working with numbers

Arithmetic Operators

Using Mathematical Functions

Logarithms and Exponentials

Infinity Function

Dealing with lost values

7 - Vectors

Creating Vectors

Combining Vectors

Repeating Vectors

Getting values in and out of Vectors

The Indexing System

Extracting values from Vectors

Changing Vector values

8 - Logical Vectors

Comparing values

Vectors as Indices

Merging Logical statements

9 - Character Vectors

Creating and assigning Named Vectors

Manipulating text

Splitting text

Concatenating text

10 - Dates and Times

Date Functions

Adding Time Details to Dates

11 - Combining Vectors into Matrix

Creating a Matrix

Ways to combine Vectors into Matrix

Calculating with Matrices

12 - Data-Frames

Building a Data-Frame from a Matrix

Other ways to create a Data-Frame

Manipulating Data Frame values

Extracting Data-Frame values

Assuming Data-Frames as a Matrix

13 - Lists

Creating a List

Unnamed Lists

Named Lists

Combining Lists

14 - Scripts

Creating a Script

Transforming a Script into a Function

Using the Function

Using Arguments, the smart way

The â€˜multiply' Argument

Default values

15 - Logical Flow

If statements

Ifâ€¦Else statements

16 - Loops

For Loop

Computing values in a For Loop

17 - Debugging your code

Error Types

Interpreting warnings and errors

Browsing through a Function

18 - Getting Data in and out of R

Entering Data in the Text Editor

Using the Clipboard

Importing Data

Exporting Data

19 - Processing Data

Choosing the right Data-Structure

Basic Subset Operators

Specifying the Subset

Summarising your Data

Counting unique values

Preparing Data

20 - Working with Graphics

Using Base Graphics

Creating Plots

Adding points to a Plot

Creating a Lattice Plot

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