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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 "R Programming for Beginners†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 †multiply' Argument
Default values
15 - Logical Flow
If statements
If…Else statements
16 - Loops
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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