

Sr. No	Lecture Title	Description	Category	Duration
Segment 3: Introduction to Packages & Data Types in R				
1	Packages	<ul style="list-style-type: none"> <li>• Introduction to Packages and their purpose in R language.</li> <li>• Accessing packages from Cran R-project website.</li> <li>• Retrieving information related to a particular package in R repository.</li> </ul>	Packages	4:00
2	Install Packages	<ul style="list-style-type: none"> <li>• Procedure to access the packages within R language.</li> <li>• Discuss different methods to install packages such as comman-line, or through CRAN repository.</li> </ul>	Packages	5:25
3	Library & Initialize Packages	<ul style="list-style-type: none"> <li>• Description of Libraries in R language.</li> <li>• Procedure to initialize packages.</li> <li>• Discuss methods to initialize packages such as command-line or through package tab.</li> </ul>	Packages	2:27
4	Getting Help with Help Pages	<ul style="list-style-type: none"> <li>• Description of getting help with help pages in R.</li> <li>• Describes syntax for particular function for getting help.</li> <li>• Describes functions with help commands for their functionality.</li> </ul>	Packages	3:42
5	Atomic Vectors	<ul style="list-style-type: none"> <li>• Introduction to atomic vectors in R language.</li> <li>• Example code for creating atomic vectors.</li> <li>• Uses of atomic vectors in R language.</li> </ul>	Vectors & Data Types	2:42
6	Doubles	<ul style="list-style-type: none"> <li>• Introduction to doubles in R language.</li> <li>• Describes double atomic vectors and initializing numeric values in R.</li> <li>• Example code to declare the atomic vectors and store multiple values in it.</li> </ul>	Vectors & Data Types	3:30
7	Integers	<ul style="list-style-type: none"> <li>• Introduction to integers in R language.</li> <li>• Declaring integers in RStudio.</li> <li>• Finding datatype of an already existing integers.</li> </ul>	Vectors & Data Types	3:23
8	Characters	<ul style="list-style-type: none"> <li>• Introduction to character datatype in R language.</li> <li>• Describes the use of character datatype in R.</li> <li>• Utilization of variables and storing them into single and multiple character values.</li> </ul>	Vectors & Data Types	4:43

9	Logicals	<ul style="list-style-type: none"> <li>• Introduction to logicals in R language.</li> <li>• Example code to store the logicals in variables.</li> </ul>	Vectors & Data Types	2:27
10	Attributes & Names	<ul style="list-style-type: none"> <li>• Description of attributes and names in R language.</li> <li>• Describes the use of attributes and names function in R.</li> <li>• Describes script to use these functions.</li> </ul>	Vectors & Data Types	4:46
11	Dim & Dimensions	<ul style="list-style-type: none"> <li>• Introduction to Dim, a built-in function in R programming.</li> <li>• Creating data in a dimension and changing atomic vector's data into multi-dimensional data.</li> <li>• Importance of dim() function in Bioinformatics.</li> </ul>	Vectors & Data Types	5:46
12	Matrix & Matrices	<ul style="list-style-type: none"> <li>• Introduction to Matrices in R language.</li> <li>• Purpose of matrix(), a built-in function in R programming.</li> <li>• Describes matrix initiation, customization of matrix rows and columns matrix layout.</li> </ul>	Vectors & Data Types	4:42
13	Arrays	<ul style="list-style-type: none"> <li>• Introduction to arrays datatype in R programming language.</li> <li>• Different way of creating dimensions and multi-dimensions.</li> <li>• Describes kind of function to use for creating dimensional data depends upon the kind of analysis one is working on.</li> </ul>	Vectors & Data Types	3:42
14	Class	<ul style="list-style-type: none"> <li>• Introduction classes in R programming language.</li> <li>• Use of built-in function class() in R programming.</li> <li>• Describe how classes in R represents data's classification.</li> </ul>	Vectors & Data Types	3:12
15	Factors	<ul style="list-style-type: none"> <li>• Introduction to factors in R programming.</li> <li>• Importance of built-in function factor() in R language.</li> <li>• Describes script to categorize data using factor() function in R.</li> </ul>	Vectors & Data Types	6:40
16	Coercion	<ul style="list-style-type: none"> <li>• Introduction to coercion in R language.</li> <li>• Describes to coerce integer data type to character data type using built-in functions in R.</li> <li>• Describes script to coerce one data type to another to make the function work properly.</li> </ul>	Vectors & Data Types	4:27

17	Lists	<ul style="list-style-type: none"><li>• Introduction to List data type in R language.</li><li>• Describes how to work with lists in R programming.</li><li>• Describes script for creating and retrieving lists in R programming.</li></ul>	Vectors & Data Types	6:41
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