

## **Day-1**

- 1.** Write a R program to take input from the user (name and age) and display the values. Also print the version of R installation.
- 2.** Write a R program to get the details of the objects in memory.
- 3.** Write a R program to create a sequence of numbers from 20 to 50 and find the mean of numbers from 20 to 60 and sum of numbers from 51 to 91.
- 4.** Write a R program to create a vector which contains 10 random integer values between -50 and +50.
- 5.** Write a R program to get the first 10 Fibonacci numbers.
- 6.** Write a R program to get all prime numbers up to a given number (based on the sieve of Eratosthenes).
- 7.** Write a R program to print the numbers from 1 to 100 and print "Fizz" for multiples of 3, print "Buzz" for multiples of 5, and print "FizzBuzz" for multiples of both.
- 8.** Write a R program to extract first 10 english letter in lower case and last 10 letters in upper case and extract letters between 22<sup>nd</sup> to 24<sup>th</sup> letters in upper case.
- 9.** Write a R program to find the factors of a given number.
- 10.** Write a R program to find the maximum and the minimum value of a given vector.

- 11.** Write a R program to get the unique elements of a given string and unique numbers of vector.
- 12.** Write a R program to create three vectors a,b,c with 3 integers. Combine the three vectors to become a 3×3 matrix where each column represents a vector. Print the content of the matrix.
- 13.** Write a R program to create a list of random numbers in normal distribution and count occurrences of each value.
- 14.** Write a R program to read the .csv file and display the content.
- 15.** Write a R program to create three vectors numeric data, character data and logical data. Display the content of the vectors and their type.
- 16.** Write a R program to create a 5 x 4 matrix , 3 x 3 matrix with labels and fill the matrix by rows and 2 × 2 matrix with labels and fill the matrix by columns.
- 17.** Write a R program to create an array, passing in a vector of values and a vector of dimensions. Also provide names for each dimension.
- 18.** Write a R program to create an array with three columns, three rows, and two "tables", taking two vectors as input to the array. Print the array.
- 19.** Write a R program to create a list of elements using vectors, matrices and a functions. Print the content of the list.
- 20.** Write a R program to draw an empty plot and an empty plot specify the axes limits of the graphic