

SARVAJANIK COLLEGE OF ENGINEERING & TECHNOLOGY

INFORMATION TECHNOLOGY DEPARTMENT

BIG DATA ANALYTICS [2171607]

PRACTICAL LIST [Odd 2019]

Part I : R Programming

1. Study of Big Data.
2. Check the output of the following commands in R Programming: help(), c(), length(), ls(), rm(), sum(), mean(), median(), var(), names(), data(), sqrt(), sd(), seq().
3. Create employee.csv file (emp_name, organization, mobile_no, email, salary, experience, and city) which contained 20 records. Write R script to read data from employee.csv and display it into R workspace.
4. Create 3 x 3 matrix to perform addition, subtraction, multiplication and division operations.
5. Find the histogram of the eruption durations in faithful. Find the histogram of the eruption waiting period in faithful.
6. Create histogram and scatter plot for vector of x and y. Each vector contained 20 randomly selected elements from range between 0 to 9.
7. Write a R program to take input from the user (name and age) and display the values. Also print the version of R installation.
8. 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.
9. Write a R program to create a vector which contains 10 random integer values between -50 and +50.
10. Write a R program to get the first 10 Fibonacci numbers.
11. Write a R program to get all prime numbers up to a given number.
12. 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.
13. Write a R program to extract first 10 english letter in lower case and last 10 letters in upper case and extract letters between 22nd to 24th letters in upper case.

14. Write a R program to find the maximum and the minimum value of a given vector.
15. Write a R program to read the .csv file and display the content.
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 x 2 matrix with labels and fill the matrix by columns.
17. Write a R program to draw an empty plot and an empty plot specify the axes limits of the graphic.
18. Write a R program to create a simple bar plot of five subjects marks.
19. Write a R program to create a Dataframes which contain details of 5 employees and display the details and also summary of the data.
20. Write a R program to create a data frame from four given vectors.
- 21 .Get the structure of a given data frame that was previously created. Also get the statistical summary and nature of the data of a given data frame.
22. Write a R program to extract specific column from a data frame using column name.
23. Write a R program to extract first two rows from a given data frame.
24. Write a R program to add a new column in a given data frame.
25. Write a R program to add new row(s) to an existing data frame..
26. Write a R program to drop column(s) by name from a given data frame , to drop row(s) by number from a given data frame.

Part II : Hadoop

1. Perform installation of Hadoop framework in Linux platform.

Part III: MongoDB

1. Perform basic CRUD operations in student table using NoSQL database mongodb.

Part IV: OEP
