**Lab 1 Exercise Questions**

1. Write a R program to create a vector which contains 10 random integer values between -50 and +50.
2. Write a R program to get the first 10 Fibonacci numbers.
3. Write a R program to get all prime numbers up to a given number.
4. 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.
5. 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.
6. 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.
7. Write a R program to create a list of random numbers in normal distribution and count occurrences of each value.
8. Write a R program to create a Dataframes which contain details of 5 employees Display the details : name, salary, designation of those employees under 40 years of age.
9. Write a R program to convert a given matrix to a 1 dimensional array.
10. Write a R program to create a two-dimensional 5×3 array of sequence of even integers greater than 50.
11. Write a R program to get the structure of a given data frame.
12. Write a R program to extract first two rows from a given data frame.
13. Write a R program to extract 3rd and 5th rows with 1st and 3rd columns from a given data frame.
14. Write a R program to add a new column in a given data frame.
15. Write a R program to add new row(s) to an existing data frame.
16. Write a R program to drop column(s) by name from a given data frame.
17. Write a R program to create a matrix taking a given vector of numbers as input
18. Write a R program to create two 2x3 matrix and add, subtract, multiply and divide the matrixes.
19. Write a R program to extract the submatrix whose rows have column value > 7 from a given matrix.
20. Write a R program to convert a matrix to a 1 dimensional array.
21. Write a R program to create a correlation matrix from a dataframe of same data type.
22. Write a R program to rotate a given matrix 90 degree clockwise rotation.
23. Write a R program to add a new item g4 = "Python" to a given list.
24. Write a R program to find all elements of a given list that are not in another given list.
25. Sum a matrice of 5x6 dimension over all the columns.
26. Convert the string value of a vector to lower case with tolower function.