## Indian Institute of Technology Jodhpur Data Analytics Lab

## **Assignment 1 (Due Date: 5 Feb 2023)**

Instructor: Dr. Gaurav Bhatnagar

2022-23, Semester II

Write the R Routine for the following problems:

(1) To find the sum of given 4 numbers. Also find its average.

- (2) A program which reads the value of the 3 sides of a triangle and calculates the area of that triangle.
- (3) To find the roots of the quadratic equation.
- (4) To find whether given integer n is a prime or not. Also write a separate/same program to generate a first 50 prime numbers.
- (5) To reverse a given integer of 5 digits.
- (6) To calculate the sum of the digits of an integer of 5 digits.
- (7) To find whether the given number is palindrome.
- (8) A program which reads two floating point numbers x and y, then interchange the values of x and y.
- (9) To find the minimum and maximum of a 1D and 2D array.
- (10) To find the mean and median of a 1D and 2D array.
- (11) To print the first n elements of Fibonacci series.
- (12) Construct a matrix and do the following:
  - (i) Matrix Addition
  - (ii) Matrix Multiplication