## DSE 2141– Data Analytics Lab Lab 1 – Date: 02<sup>nd</sup> August 2023

- 1. Create Python program to find the average of 10 numbers using while loop
- 2. Create Python program to find the geometric mean of n numbers
- 3. Create Python program to check whether the given integer is a prime number or not
- 4. Create Python program to implement linear search and implement binary search
- 5. Using math package, Create Python program to find the area of a triangle whose sides are given

## **EXERCISE 1: - Introduction to Pandas**

## Data frame creation and manipulation

- 1. Create a data frame with details of 10 students and columns as Roll Number, Name, Gender, Marks1, Marks2, Marks3.
- 2. Create a new column with total marks
- 3. Find the lowest marks in Marks1
- 4. Find the Highest marks in Marks2
- 5. Find the average marks in Marks3
- 6. Find student name with highest average
- 7. Find how many students failed in Marks2 (<40)