

## Lab File Questions

### Instructions:

- All the programs should be hand-written. No print out allowed.
  - File must be submitted on or before 4<sup>th</sup> Oct, 2023. Late submissions will not be considered.
1. Write a C program to check whether the given number is prime or not.
  2. Write a C program to check whether the given number is a palindrome or not.
  3. WAP to check if three points (x1,y1), (x2,y2) and (x3,y3) are collinear or not.
  4. According to the gregorian calendar, it was Monday on the date 01/01/01. If Any year is input through the keyboard write a program to find out what was the day on 1st January of this year.
  5. Write a program to generate the Fibonacci series using recursive function.
  6. The population of the town is 100000. The population has increased steadily at the rate of 10% per year for the last 10 years. Write a program to determine the population at the end of each year in the last decade.
  7. WAP to print.

1

12

123

1234

12345

1234

123

12

1

8. WAP to read a list of integers and store it in a single dimensional array. Write a C program to print the second largest integer in a list of integers.
9. WAP that reads two matrices A (m x n) and B (p x q) and computes the product of A and B.
10. Write a C program that uses functions to perform the following operations:
  - a. Reading a complex number.
  - b. Writing a complex number.
  - c. Addition and subtraction of two complex numbers