## **Laboratory Experiment No.: 3**

## Dt.28/08/2024

- Q1. Write a program to find the list of generators present in  $Z_n^*$  where n is a large integer.
- Q2. Write a program to find the list of cyclic group present within a range (Example: 2000 to 3000).
- Q3. Write a program to find the order of an element in  $Z_n^*$  where n is a large integer.
- Q4. Write a program to find the quadratic residue and quadratic nonresidue mod n where n is a large integer.
- Q5. Write a program to find the square root of a modulo n where n is a large integer.