Paper Code : SWL:305

Paper Name : Software Lab III *(Computer Oriented Numerical Methods)*

1. Write a program to perform arithmetic operations of normalized floating point numbers
2. Write a program to find the root of a quadratic equation using Bisection Method
3. Write a program to find the root of a quadratic equation using Regula Falsi Methods
4. Write a program to find the root of a quadratic equation using Newton Raphson Method
5. Write a program to find the root of a quadratic equation using Secant Method
6. Write a program to find the solution of simultaneous algebraic equations using Gauss Elimination Method.
7. Write a program to find the solution of simultaneous algebraic equations using Gauss-Seidel Iterative method.
8. Write a program to implement Lagrange Interpolation.
9. Write a program to find the value of a polynomial f(x) at a particular point x using difference table.
10. Write a program to compute cos (x) using Taylor Series approximation algorithm.
11. Write a program to integrate a tabulated function using Trapezoidal Rule
12. Write a program to integrate a tabulated function using Simpson's rule.
13. Write a program to integrate a tabulated function using Gauss Legendre formula.
14. Write a program to solve a differential equation using Euler's Method.
15. Write a program to solve a differential equation using Heun's Method.
16. Write a program to solve a differential equation using Predictor-corrector method.