

DEPARTMENT OF MATHEMATICS
BIRLA INSTITUTE OF TECHNOLOGY MESRA, RANCHI
IMM5002 Numerical Method Lab, Session: (MO-19)
Lab Assignment - 09

1. Use the Jacobi method to solve the linear systems with $TOL = 10^{-3}$,

$$x_1 + 4x_2 - x_3 - x_4 = -1$$

$$4x_1 + x_2 - x_3 + x_4 = -2$$

$$x_1 - x_2 + x_3 + 3x_4 = 1$$

$$-x_1 - x_2 + 5x_3 + x_4 = 0.$$

2. Repeat the exercise 1 using Gauss-Seidel method.
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