Lab Assignment#2

Gauss Elimination

Find the column vector **X** that satisfy the matrix equation, **A*X = B** using **Gauss Elimination,**

Where

$$\mathbf{A} = \begin{bmatrix} 3.0 & -0.1 & -0.2 & 7.85 & 1.2 \\ 0.1 & 7.0 & -0.3 & -19.3 & 2.7 \\ 0.3 & -0.2 & 10.0 & 71.4 & 12.3 \\ 7.3 & -1.2 & 10.0 & 21.4 & 12.0 \\ 1.3 & 1.2 & 1.0 & 1.4 & 9.8 \end{bmatrix}$$

and, column vector, **B**,

$$\mathbf{B} = \begin{bmatrix} 3.4 \\ 8.7 \\ 0.2 \\ 6.6 \\ 8.9 \end{bmatrix}$$

Verify your answer, calculating (**A*X – B**).

Notes: Your programs should **read** the I/P matrix from a **file.**

Name the O/P file containing the solution, **X**, as "**OutPut2**".