

## 1 Homework

Write a C program that computes inverse of a square matrix which is given as input, by using Gauss-Jordan Elimination method. Program can also

- ask the dimension,  $N$ , of the input square matrix,
- ask the elements of the input matrix one by one,
- warn the user about the singularity of the input matrix.

*Hint: Use static array for the input matrix whose maximum dimension,  $N$ , is 10.*

Example console screen for a  $2 \times 2$  matrix,  $\begin{bmatrix} 1 & -1 \\ 2 & 3 \end{bmatrix}$

```
Enter the value N, of an NxN matrix: 2
Enter the element (1,1): 1
Enter the element (1,2): -1
Enter the element (2,1): 2
Enter the element (2,2): 3
```

```
Inverse of the matrix is:
0.600  0.200
-0.400 0.200
```