Assignment 1.

You are to generate 2 pieces of C++ code

1. Makemat
2. Gaussian\_solver

Makemat

1. User inputs value N = number of rows and columns in the matrix
2. Generate a random matrix A[n][n] and a solution vector soln[n]
3. Ensure A is diagonally dominant e.g. set the diagonal to 10\*the sum of the absolute values in each row
4. Multiply A\*soln to get b[n]
5. Write a file with n and A(nxn) then b(n)
6. Exit

Gaussian solver

Load the file from Makemat and solve them.

Compute and display the solution and the two norm of the error