for(k=0; k < N-1; k++){

for(int i=k+1;i<N;i++){

double l\_ik = A(i,k)/A(k,k);

for(int j=k;j<N;j++)

A(i,j) = A(i,j) - l\_ik\*A(k,j);

b(i) = b(i) - l\_ik\*b(k);

}

}

// Step (3) (backsolveing to solve Ux=y)

b(N-1) = b(N-1)/A(N-1,N-1);

for(k=N-2;k>=0;k--){

for(int j=k+1;j<N;j++)

b(k) -= A(k,j)\*b(j);

b(k) = b(k)/A(k,k);

}

Forward Solving: ( to solve Ly=b)

b(1) = b(1)/A(1,1);

for(k=2;k <= N; k++){

for(int j=k-1;j>0;j--)

b(k) -= A(k,j)\*b(j);

b(k) = b(k)/A(k,k);

}