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```
clear all;
clear;
clc;

A= load('A.txt'); % load matrix A
b= ones(size(A,1),1); % Initialize vector b
roll=39;
b=b*(roll+2);

%%% Jacobi Method
fprintf('For Jacobi method: \n\n');
y= jacobi_method(A,b);
fprintf('x:\n');
disp(y);

%%% Gauss Seidel Method
fprintf('For Gauss Seidel method: \n\n');
x= gauss_seidel(A,b);
fprintf('x:\n');
disp(x);
fprintf('A*x=\n');
disp(A*x);

%%% Gauss Elimination Method
fprintf('For Gauss Elimination method: \n\n');
z= Gauss_elimination(A,b);
z= z.';
fprintf('x:\n');
disp(z);
fprintf('A*x=\n');
disp(A*z);

For Jacobi method:

No. of operations: 594645
x:
    NaN
    NaN
    NaN
    NaN
    NaN
    NaN
    NaN
    NaN
    NaN
    NaN
    NaN
    Inf
   -Inf
    Inf
   -Inf
    Inf
```

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For Gauss Seidel method:

No. of operations: 70724910

x:

1.0e+05 \*

0.0123  
0.0676  
0.1603  
0.2849  
0.4366  
0.6109  
0.8036  
1.0111  
1.2300  
1.4575  
1.6912  
1.9290  
2.1693  
2.4108  
2.6527

A\*x=

41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000

For Gauss Elimination method:

No. of operation = 2570

x:

1.0e+05 \*

0.0123  
0.0677  
0.1603  
0.2850  
0.4367  
0.6109  
0.8036  
1.0111  
1.2300

---

1.4576  
1.6913  
1.9291  
2.1693  
2.4108  
2.6527

A\*x=

41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
41.0000  
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41.0000  
41.0000  
41.0000

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