

```
Enter the numbr of equations: 3

Enter the entries of the coefficient matrix row-wise: [4 3 0; 3 4 -1; 0 -1 4]

Enter the RHS given data of the system (as column vector) : [24; 30; -24]

Enter the initial guess (as column vector): [1; 1;1]

Enter the maximum number of iteration: 10

10 number of Gauss-Seidal iterations are given as (columnwise):

1.000000  5.250000  3.140625  3.087891  3.054932  3.034332  3.021458  3.013411  3.008382  3.005239  3.003274
1.000000  3.812500  3.882812  3.926758  3.954224  3.971390  3.982119  3.988824  3.993015  3.995634  3.997272
1.000000 -5.046875 -5.029297 -5.018311 -5.011444 -5.007153 -5.004470 -5.002794 -5.001746 -5.001091 -5.000682

>>
```