

```
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

Enter a value of the SOR Parameter: 1.25

10 number of SOR iterations are given as (columnwise):

1.000000  6.312500  2.622314  3.133303  2.957051  3.003721  2.996328  3.000050  2.999745  3.000002  2.999985
1.000000  3.519531  3.958527  4.010265  4.007484  4.002925  4.000926  4.000259  4.000065  4.000015  4.000003
1.000000 -6.650146 -4.600424 -5.096686 -4.973490 -5.005714 -4.998282 -5.000349 -4.999892 -5.000022 -4.999993

>>
```