```c
/*Implementation of solution of system of linear equations by Gauss-Jacobi's iteration method.
 Coded by Ashwini Kumar Singh on 10-Feb-2021*/

#include<stdio.h>
#include<math.h>

int main() {
    int i,j,m,n,itrn;


printf("\n*********************************************************************************
\n");
    printf("\nImplementation of solution of system of linear equations by Gauss-Jacobi's
iteration method\n");
    printf("\nCoded by Ashwini Kumar Singh on 10-Feb-2021\n");

printf("\n*********************************************************************************
\n");

    printf("\nEnter the no. of unknown(n) : \n");
    scanf("%d",&n);

    float x[n],a[n][n],b[n],c[n];

    printf("\nEnter the number of iterations : \n");
    scanf("%d",&itrn);

    printf("\nEnter the right hand side constants : \n");
    for(i=0;i<n;i++) {
        scanf("%f",&b[i]);
    }

    printf("\nEnter the coefficients row wise : \n");
    for(i=0;i<n;i++) {
        x[i]=0;
        for(j=0;j<n;j++) {
            scanf("%f",&a[i][j]);
```

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33          }
34      }
35
36      FILE *output;
37      output=fopen("outGaussJacobiItr.tsv","w");
38
39      fprintf(output,"\nIteration");
40      for(i=1;i<=n;i++)
41          {
42              fprintf(output,"\tJx%d",i);
43          }
44
45      m=1;
46      do{
47      for(i=0;i<n;i++) {
48          c[i]=b[i];
49          for(j=0;j<n;j++) {
50              if(i!=j) {
51                  c[i]=c[i]-a[i][j]*x[j];
52              }
53          }
54      }
55      for(i=0;i<n;i++) {
56          x[i]=c[i]/a[i][i];
57      }
58
59      printf("\n%d\t:\t",m);
60      fprintf(output,"\n%d\t",m);
61      for(i=0;i<n;i++)
62          {
63              printf("x(%d) = %f\t",i+1,x[i]);
64              fprintf(output,"%f\t",x[i]);
65          }
66      m++;
67      }while(m<=itrn);
68
69      printf("\n\nThe Solution is : \n");
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70          for(i=0;i<n;i++)
71              {
72                  printf("\nx(%d) = %f",i,x[i]);
73              }
74      }
75
```