**How to find inverse of a matrix in c**

**C code to find inverse of a matrix**

**Inverse of a 3x3 matrix in c**

#include<stdio.h>

int main(){

  int a[3][3],i,j;

  float determinant=0;

  printf("Enter the 9 elements of matrix: ");

  for(i=0;i<3;i++)

      for(j=0;j<3;j++)

           scanf("%d",&a[i][j]);

  printf("\nThe matrix is\n");

  for(i=0;i<3;i++){

      printf("\n");

      for(j=0;j<3;j++)

           printf("%d\t",a[i][j]);

  }

  for(i=0;i<3;i++)

      determinant = determinant + (a[0][i]\*(a[1][(i+1)%3]\*a[2][(i+2)%3] - a[1][(i+2)%3]\*a[2][(i+1)%3]));

   printf("\nInverse of matrix is: \n\n");

   for(i=0;i<3;i++){

      for(j=0;j<3;j++)

           printf("%.2f\t",((a[(i+1)%3][(j+1)%3] \* a[(i+2)%3][(j+2)%3]) - (a[(i+1)%3][(j+2)%3]\*a[(i+2)%3][(j+1)%3]))/ determinant);

       printf("\n");

   }

   return 0;

}

Enter the 9 elements of matrix: 3

5

2

1

5

8

3

9

2

The matrix is

3       5       2

1       5       8

3       9       2

Inverse of matrix is:

0.70    -0.25   0.07

-0.09   -0.00   0.14

-0.34   0.25    -0.11