TITLE 20

Write a C program to input two matrices of 5\*5 add them and output the resultant matrix

OBJECTIVE:

To find the sum of matrices.

PROBLEM STATEMENT:

To know the implementation of matrices using for loops

ALGORITHM:

START

INPUT: input from users.

COMPUTATION: All the elements are entered in the matrices

DISPLAY: Prints the sum of the matrices

STOP

PROGRAM:

#include <stdio.h>  
   
int main()  
{  
   int m, n, i, j, First[100][100], Second[100][100], sum[100][100];  
   
   printf("Enter the number of rows and columns of matrix:\n");  
   scanf("%d%d", &m, &n);  
   printf("Enter the elements of first matrix:\n");  
  for (c = 0; c < m; c++)  
      for (d = 0; d < n; d++)  
         scanf("%d", &first[c][d]);  
  printf("Enter the elements of second matrix:\n");  
  for (c = 0; c < m; c++)  
      for (d = 0 ; d < n; d++)  
         scanf("%d", &second[c][d]);  
   printf("Sum of entered matrices:\n");  
   for (c = 0; c < m; c++) {  
      for (d = 0 ; d < n; d++) {  
         sum[c][d] = first[c][d] + second[c][d];  
         printf("%d\t", sum[c][d]);  
      }  
      printf("\n");  
   }  
  return 0;  
}

CONCLUSION:

OUTPUT:

Enter the number of rows and columns of matrix:

2

2

Enter the elements of first matrix:

1 2 5 7 10

3 4 6 8 10

4 5 9 10 2

1 310 10 2

1 2 3 4 5

Enter the elements of second matrix:

4 5 9 10

1 310 10

1 2 5 7 10

3 4 6 8 10

1 2 3 4 5

Sum of entered matrices:

5 7 16 20 4

4 7 18 20 4

5 7 16 20 4

4 7 18 20 4

2 4 6 8 10