

Write a C program to add two matrices.

Code-

```
#include <stdio.h>
int main()
{
    int i,j,m,n,p,q;
    printf("Write no. of rows and columns for 1st matrix");
    scanf("%d%d",&m,&n);
    printf("Write no. of rows and columns for 2nd matrix");
    scanf("%d%d",&p,&q);
    int a[m][n],b[p][q];
    printf("Write elements of 1st matrix");
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
            scanf("%d",&a[i][j]);
    }
    printf("Write elements of 2nd matrix");
    for(i=0;i<p;i++)
    {
        for(j=0;j<q;j++)
            scanf("%d",&b[i][j]);
    }
    if(m==p&&n==q)
    {
        int c[m][n];
        for(i=0;i<m;i++)
        {
            for(j=0;j<n;j++)
                c[i][j]=a[i][j]+b[i][j];
        }
        printf("New matrix-\n");
        for(i=0;i<m;i++)
        {
            for(j=0;j<n;j++)
                printf("%d ",c[i][j]);
            printf("\n");
        }
    }
    else printf("Matrix can't be added");
    return 0;
}
```

Input-

Write no. of rows and columns for 1st matrix2

2

Write no. of rows and columns for 2nd matrix2

2

Write elements of 1st matrix2

4

6

8

Write elements of 2nd matrix3

5

7

9

Output-

New matrix-

5 9

13 17