

ADD TWO 2-D ARRAYS

```
        /****      Program to Add Two 2-D Arrays      ****/  
  
#include <stdio.h>  
  
void add();  
  
int a[10][10], b[10][10], c[10][10], m, n, x, y;  
  
main()  
{  
    int i, j;  
  
    printf("\nEnter number of rows & cols of array A: ");  
    scanf("%d%d", &m, &n);  
  
    printf("\nEnter elements of array A:\n");  
    for(i=0; i<m; i++)  
        for(j=0; j<n; j++)  
            scanf("%d", &a[i][j]);  
  
    printf("\nEnter number of rows & cols of array B: ");  
    scanf("%d%d", &x, &y);  
  
    printf("\nEnter elements of array B:\n");  
    for(i=0; i<x; i++)  
        for(j=0; j<y; j++)  
            scanf("%d", &b[i][j]);  
  
    printf("\n\nArray A:\n\n");  
    for(i=0; i<m; i++)  
    {  
        for(j=0; j<n; j++)  
            printf("\t%d", a[i][j]);  
        printf("\n\n");  
    }  
    printf("\n\nArray B:\n\n");  
    for(i=0; i<x; i++)  
    {  
        for(j=0; j<y; j++)  
            printf("\t%d", b[i][j]);  
        printf("\n\n");  
    }  
}
```

```
add();

printf("\n\nArray after addition:\n\n");
for(i=0; i<m; i++)
{
    for(j=0; j<n; j++)
        printf("\t%d", c[i][j]);
    printf("\n\n");
}
getch();
}

void add()
{
    int i, j;

    if(m!=x || n!=y)
    {
        printf("\n\nAddition is not possible.");
        exit();
    }

    for(i=0; i<m; i++)
        for(j=0; j<n; j++)
            c[i][j] = a[i][j] + b[i][j];
}
```