Addition

```c
#include<stdio.h>
#include<conio.h>
void main()
{
        int a[2][3],b[2][3],c[2][3],i,j;
        printf("\nENTER VALUES FOR MATRIX A:");
        for(i=0;i<2;i++)
        for(j=0;j<3;j++)
        scanf("%d",&a[i][j]);
        printf("\nENTER VALUES FOR MATRIX B:");
        for(i=0;i<2;i++)
        for(j=0;j<3;j++)
    scanf("%d",&b[i][j]);
        for(i=0;i<2;i++)
                for(j=0;j<3;j++)
        c[i][j]=a[i][j]+b[i][j];
        printf("\nTHE VALUES OF MATRIX C ARE:");
        for(i=0;i<2;i++)
        {
                for(j=0;j<3;j++)
                printf("%5d",c[i][j]);
                printf("\n");
        }
        getch();
}
```

OUTPUT

Select C:\Users\user\Documents\addition.exe

```
ENTER VALUES FOR MATRIX A:
1 2 3
6 5 4

ENTER VALUES FOR MATRIX B:
7 8 9
1 4 3

THE VALUES OF MATRIX C ARE:    8   10   12
    7    9    7
```

Multiplication

```c
#include<stdio.h>
#include<stdlib.h>
int main()
{
    int a[10][10],b[10][10],mul[10][10],r,c,i,j,k;
    printf("enter the number of row:");
    scanf("%d",&r);
    printf("enter the number of column:");
    scanf("%d",&c);
    printf("enter the first matrix element:\n");
    for(i=0;i<r;i++)
    {
        for(j=0;j<c;j++)
        {
            scanf("%d",&a[i][j]);
        }
    }
    printf("enter the second matrix element:\n");
    for(i=0;i<r;i++)
    {
        for(j=0;j<c;j++)
        {
            scanf("%d",&b[i][j]);
        }
```

```c
}
printf("multiply of the matrix:\n");
for(i=0;i<r;i++)
{
	for(j=0;j<c;j++)
	{
		mul[i][j]=0;
		for(k=0;k<c;k++)
		{
			mul[i][j]+=a[i][k]*b[k][j];
		}
	}
}
for(i=0;i<r;i++)
{
	for(j=0;j<c;j++)
	{
		printf("%d\t",mul[i][j]);
	}
	printf("\n");
}
return 0;
}
```

OUTPUT


```
C:\Users\user\Documents\multiplication.exe

enter the number of row:3
enter the number of column:3
enter the first matrix element:
3 2 1
4 4 4
3 3 1
enter the second matrix element:
1 1 1
6 3 4
5 8 1
multiply of the matrix:
20       17       12
48       48       24
26       20       16


--------------------------------
Process exited after 60.04 seconds with return value 0
Press any key to continue . . .
```