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Write a C program to multiply two matrices $C = A * B$. Take the size and element of matrices through keyboard and element of matrices not less than zero or negative.

```
#include<stdio.h>
#include<conio.h>
void matrix(int mat[100][100], int , int );
void display(int mat[100][100], int , int );
void mul(int c[100][100], int a[100][100], int b[100][100], int n1, int
m2);

void main()
{
    int a[100][100],b[100][100],c[100][100];
    int n1,m1,n2,m2;
    clrscr();
    printf("\n Enter the Order of 1st matrix ");
    scanf("%d%d",&n1,&m1);
    printf("\n Enter the Order of 2nd Matrix ");
    scanf("%d%d",&n2,&m2);
    if(m1==n2)
    {
        printf("\n Enter the Element of 1st Matrix ");
        matrix(a,n1,m1);
        printf("\n Enter the Element of 2nd Matrix ");
        matrix(b,n2,m2);
        printf("\n 1st matrix \n");
        display(a,n1,m1);
        printf("\n 2nd matrix \n");
        display(b,n2,m2);
        mul(c,a,b,n1,m2);
        printf("\n Production Of Matrix \n");
```

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```
        display(c,n1,m2);
    }
    else
    {
        printf("\n Matrix can't solve ");
    }
    getch();
}
void matrix(int mat[100][100], int n, int m)
{
    int i,j,t;
    for(i=0;i<n;i++)
    {
        for(j=0;j<m;j++)
        {
            scanf("%d",&t);
            while(t<=0)
            {
                scanf("%d",&t);
            }
            mat[i][j]=t;
        }
    }
}
void display(int mat[100][100], int n, int m)
{
    int i,j;
    for(i=0;i<n;i++)
    {
        for(j=0;j<m;j++)
            printf("%5d",mat[i][j]);
        printf("\n");
    }
}
```

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```
    }  
}  
  
void mul(int c[100][100], int a[100][100], int b[100][100], int n1, int  
m2)  
{  
    int i,j,k,sum;  
    for(i=0;i<n1;i++)  
    {  
        for(j=0;j<m2;j++)  
        {  
            sum=0;  
            for(k=0;k<n1;k++)  
                sum=sum+a[i][k]*b[k][j];  
            c[i][j]=sum;  
        }  
    }  
}
```

Matrix 1	Matrix 2	Multiplay Matrix
1 2	1 4	11 10
3 4	2	14
	5 3	23 24
	6	28