

```

#include <stdio.h>
int main()
{
    int A[10][10],B[10][10],C[10][10];
    int m,n,p,q,i,j,k;
    printf("Enter the no.of rows and columns in A matrix :");
    scanf("%d%d",&m,&n);
    printf("Enter the no.of rows and columns in B matrix :");
    scanf("%d%d",&p,&q);
    if (n != p) {
        printf("Multiplication is not possible for matrix A and B.");
    }
    printf("Enter the elements of matrix A: ");
    for (i=0;i<m;i++) {
        for (j=0;j<n;j++) {
            scanf("%d",&A[i][j]);
        }
    }
    printf("Enter the elements of matrix B: ");
    for (i=0;i<p;i++) {
        for (j=0;j<q;j++) {
            scanf("%d",&B[i][j]);
        }
    }
    for (i=0;i<m;i++) {
        for (j=0;j<q;j++) {
            C[i][j] = 0;
        }
    }
    for (i=0;i<m;i++) {
        for (j=0;j<q;j++) {
            for (k=0;k<n;k++) {
                C[i][j] += A[i][k]*B[k][j];
            }
        }
    }
    printf("Multiplication of matrix A and matrix B is: \n");
    for (i=0;i<m;i++) {
        for (j=0;j<q;j++) {
            printf(" %d",C[i][j]);
        }
        printf("\n");
    }
    return 0;
}

```

```
C:\Users\user\OneDrive\Desk X + v
Enter the no.of rows and columns in A matrix :2 2
Enter the no.of rows and columns in B matrix :2 2
Enter the elements of matrix A: 1 2 3 4
Enter the elements of matrix B: 5 6 7 8
Multiplication of matrix A and matrix B is:
19 22
43 50

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Process exited after 16.15 seconds with return value 0
Press any key to continue . . .
```