

```

#include<stdio.h>
#include<stdlib.h>
int main(){
int a[10][10],b[10][10],mul[10][10],r,c,i,j,k;
system("cls");
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]);
}
}

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 printing result
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
printf("%d\t",mul[i][j]);
}
printf("\n");
}
return 0;
}

```

```
touch matrex_c.c
```

```
sudo apt-get install build-essential
```

```
sudo apt install gcc
```

```
gcc -o matrex_c matrex_c.c
```

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./matrex_c
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```
import java.util.Scanner;

public class Main {

    public static void main(String[] args) {

        Scanner scan= new Scanner(System.in);

        System.out.print("Enter number of row: ");

        int row = scan.nextInt();

        System.out.print("Enter number of column: ");

        int column = scan.nextInt();

        float firstMatrix[][] = new float[row][column],

        secondMatrix[][] = new float[row][column],

        resultMatrix[][] = new float[row][column];

        System.out.println("Enter first matrix:");

        for(int i=0;i<row;i++) {

            for(int j=0;j<column;j++) {

                firstMatrix[i][j]=scan.nextFloat();

            }

        }

        System.out.println("Enter second matrix:");

        for(int i=0;i<row;i++) {

            for(int j=0;j<column;j++) {

                secondMatrix[i][j]=scan.nextFloat();

            }

        }

        for (int i = 0; i < row; i++) {

            for (int j = 0; j < column; j++) {

                for (int k = 0; k < row; k++)

                    resultMatrix[i][j] += firstMatrix[i][k] * secondMatrix[k][j];

            }

        }

        for (int i = 0; i < row; i++) {

            for (int j = 0; j < column; j++)

                System.out.print(resultMatrix[i][j] + " ");

            System.out.println();

        }

    }

}
```

```
sudo apt-get install openjdk-8-jre
```

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y
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sudo apt-get install openjdk-8-jdk
```

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y
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```
javac -version
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```
touch Main.java
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javac Main.java
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java Main
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3
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