

```

#include<iostream>
using namespace std;
int main()
{
int r,c,i,j,ch;
int mul[10][10];
cout<<"\nEnter no.of rows: ";
cin>>r;
cout<<"Enter no. of columns: ";
cin>>c;
int a[10][10],b[10][10],d[10][10];
cout<<endl<<"Enter elements of first matrix: ";
//Accepting and displaying 2 matrices
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
cin>>a[i][j];
}
}
cout<<endl<<"Enter elements of second matrix: ";
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
cin>>b[i][j];
}
}
cout<<"Your 1st entered Matrix is: "<<endl;
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
cout<<a[i][j]<<" ";
}
cout<<endl;
}
cout<<"Your 2nd entered Matrix is: "<<endl;
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
cout<<b[i][j]<<" ";
}
}
}

```

```

cout<<endl;
}
int flag=0;
while(flag==0)
{
cout<<"\t1. Subtraction of Matrix"<<endl;
cout<<"\t2. Multiplication of matrices"<<endl;
cout<<"\t3. Exit"<<endl;
cout<<"Enter your choice: "<<endl;
cin>>ch;
switch(ch)
{
case 1:
//subtraction of matrix
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
d[i][j]=a[i][j]-b[i][j];
}
}

//display of subtraction
cout<<"Subtraction of entered 2 matrices is: "<<endl;
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
cout<<d[i][j]<<" ";
}
cout<<endl;
}
break;
case 2:
//Multiplication of matrix
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
mul[i][j]=0;
for(int k=0;k<c;k++)
{
mul[i][j]=mul[i][j]+a[i][k]*b[k][j];
}
}
}
}

```

```
}  
//Display multiplication  
cout<<"Multiplication of both matrix is: "<<endl;  
for(i=0;i<r;i++)  
{  
for(j=0;j<c;j++)  
{  
cout<<mul[i][j]<<" ";  
}  
cout<<endl;  
}  
break;  
case 3:  
flag=1;  
break;  
default:  
cout<<"Invalid Input";  
}  
}  
return 0;  
}
```