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**MULTIPLY MATRICES**

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#include<iostream>

using namespace std;

int main()

{

    int a[5][5],b[5][5],c[5][5],m,n,p,q,i,j,k;

    cout<<"Enter rows and columns of first matrix:";

    cin>>m>>n;

    cout<<"Enter rows and columns of second matrix:";

    cin>>p>>q;

    if(n==p)

    {

        cout<<"\nEnter first matrix:\n";

        for(i=0;i<m;++i)

            for(j=0;j<n;++j)

                cin>>a[i][j];

        cout<<"\nEnter second matrix:\n";

        for(i=0;i<p;++i)

            for(j=0;j<q;++j)

                cin>>b[i][j];

        cout<<"\nThe new matrix is:\n";

        for(i=0;i<m;++i)

        {

            for(j=0;j<q;++j)

            {

                c[i][j]=0;

                for(k=0;k<n;++k)

                    c[i][j]=c[i][j]+(a[i][k]\*b[k][j]);

                cout<<c[i][j]<<" ";

        }

            cout<<"\n";

        }

    }

    else

        cout<<"\nSorry!!!! Matrix multiplication can't be done";

    return 0;

}

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**ADDING MATRICES**

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#include<iostream>

#include<process.h>

using namespace std;

int main()

{

    int A[10][10],B[10][10],c[10][10];

    int i,j,m,n,p,q;

    cout<<"Enter no. of rows and cloumns of matrix A:";

    cin>>m>>n;

    cout<<"\nEnter no. of rows and columns of matrix B:";

    cin>>p>>q;

    if(m==p&&n==q)

        cout<<"\n\nMatrices can be Added";

    else

    {

        cout<<"\n\nMatrices can not Added";

        exit(0);

    }

    cout<<"\nEnter matrix A row wise:";

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

            cin>>A[i][j];

    }

    cout<<"\nMatrix A:\n";

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        cout<<A[i][j]<<" ";

        cout<<"\n";

    }

    cout<<"\nEnter Matrix B row wise:";

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        cin>>B[i][j];

    }

    cout<<"\n\nMatrix B:\n";

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        cout<<B[i][j]<<" ";

        cout<<"\n";

    }

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        c[i][j]=A[i][j]+B[i][j];

    }

    cout<<"\nSum of Matrices A and B:\n";

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        cout<<c[i][j]<<" ";

        cout<<"\n";

    }

    return 0;

}