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// Chuong trinh viet ham cong hai ma tran

#include <iostream>

#include <time.h>

using namespace std;

void CongMaTran ( double A[][100], double B[][100], double C[][100], int m, int n );

void XuatMaTran ( double C[][100], int m, int n );

int main ()

{

double A[][100] = {0};

double B[][100] = {0};

double C[][100] = {0};

int m,n,k,h;

cout <<" Nhap so dong cua ma tran A: "; cin >> m; cout << endl;

cout <<" Nhap so cot cua ma tran A: "; cin >> n; cout << endl;

cout <<" Nhap so dong cua ma tran B: "; cin >> k; cout << endl;

cout <<" Nhap so cot cua ma tran B: "; cin >> h; cout << endl;

// Kiem tra xem hai ma tran co cung kich co khong

if ( m != k || n != h )

{

cout <<" Hai ma tran khong cung kich thuoc!!!\n";

system ("pause");

return 0;

}

// Nhap ma tran A

cout <<" Nhap ma tran A: \n";

for ( int i = 0; i < m; i++)

{

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

{

/\*cout <<" Nhap phan tu thu [" << i <<"][" << j <<"]: ";

cin >> A[i][j];\*/

A[i][j] = rand() % 10;

}

cout << endl;

}

// Xuat ma tran A

cout <<" Ma tran A sau khi nhap la: \n";

for ( int i = 0; i < m; i++)

{

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

{

cout << A[i][j] << "\t";

}

cout << endl;

}

// Nhap ma tran B

cout <<" Nhap ma tran B: \n";

for ( int i = 0; i < m; i++)

{

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

{

/\*cout <<" Nhap phan tu thu [" << i <<"][" << j <<"]: ";

cin >> B[i][j];\*/

B[i][j] = rand() % 10;

}

cout << endl;

}

// Xuat ma tran B

cout <<" Ma tran B sau khi nhap la: \n";

for ( int i = 0; i < m; i++)

{

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

{

cout << B[i][j] << "\t";

}

cout << endl;

}

// Cong hai ma tran

cout <<" Ma tran A + B la: \n";

CongMaTran ( A, B, C, m, n );

// Xuat ma tran tong

XuatMaTran ( C, m, n );

cout << endl;

system ("pause");

return 0;

}

void CongMaTran ( double A[][100], double B[][100], double C[][100], int m, int n )

{

for ( int i = 0; i < m; i++)

{

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

{

C[i][j] = A[i][j] + B[i][j];

}

}

}

void XuatMaTran ( double C[][100], int m, int n )

{

for ( int i = 0; i < m; i++)

{

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

{

cout << C[i][j] << "\t";

}

cout << endl;

}

}