#include <iostream>

using namespace std;

int main()

{

int a[10][10], trans[10][10], r, c, i, j;

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

cin >> r >> c;

// Storing element of matrix entered by user in array a[][].

cout << endl << "Enter elements of matrix: " << endl;

for(i = 0; i < r; ++i)

for(j = 0; j < c; ++j)

{

cout << "Enter elements a" << i + 1 << j + 1 << ": ";

cin >> a[i][j];

}

// Displaying the matrix a[][]

cout << endl << "Entered Matrix: " << endl;

for(i = 0; i < r; ++i)

for(j = 0; j < c; ++j)

{

cout << " " << a[i][j];

if(j == c - 1)

cout << endl << endl;

}

// Finding transpose of matrix a[][] and storing it in array trans[][].

for(i = 0; i < r; ++i)

for(j = 0; j < c; ++j)

{

trans[j][i]=a[i][j];

}

// Displaying the transpose,i.e, Displaying array trans[][].

cout << endl << "Transpose of Matrix: " << endl;

for(i = 0; i < c; ++i)

for(j = 0; j < r; ++j)

{

cout << " " << trans[i][j];

if(j == r - 1)

cout << endl << endl;

}

return 0;

}