// C++ program to illustrate

// array of vectors

#include <iostream>

#include <vector>

using namespace std;

// Declaring array of vectors

// globally

vector<int> v[5];

// Function for inserting elements

// in array of vectors

void insertionInArrayOfVectors()

{

    for (int i = 0; i < 5; i++) {

        // Inserting elements at every

        // row i using push\_back()

        // function in vector

        for (int j = i + 1; j < 5; j++) {

            v[i].push\_back(j);

        }

    }

}

// Function to print elements in array

// of vectors

void printElements()

{

    // Traversing of vectors v to print

    // elements stored in it

    for (int i = 0; i < 5; i++) {

        cout << "Elements at index "

             << i << ": ";

        // Displaying element at each column,

        // begin() is the starting iterator,

        // end() is the ending iterator

        for (auto it = v[i].begin();

             it != v[i].end(); it++) {

            // (\*it) is used to get the

            // value at iterator is

            // pointing

            cout << \*it << ' ';

        }

        cout << endl;

    }

}

// Function to illustrate array

// of vectors

void arrayOfVectors()

{

    // Inserting elements in array

    // of vectors

    insertionInArrayOfVectors();

    // Print elements stored in array

    // of vectors

    printElements();

}

// Driver code

int main()

{

    arrayOfVectors();

    return 0;

}