//============================================================================

// Name : ASSI4.cpp

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// Version :

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// Description : Hello World in C++, Ansi-style

//============================================================================

/\*

\* There are flight paths between cities. If there is a flight between city A and city B then there is an edge between the cities.

\* The cost of the edge can be the time that flight takes to reach city B from A, or the amount of fuel used for the journey.

\* Represent this as a graph. The node can be represented by airport name or name of the city.

\* Use adjacency list representation of the graph or use adjacency matrix representation of the graph.

\* Justify the storage representation used.

\*

\* \*/

#include <iostream>

using namespace std;

class list

{

public:

int arr[30][30];

void init()

{

for(int i=0;i<30;i++)

{

for(int j=0;j<30;j++)

{

arr[i][j]=0;

}

}

}

void input(int n)

{

int s;

int dest;

int d;

int f;

cout<<"\nEnter the Source\n";

cin>>s;

cout<<"\nEnter the total no of Destination\n";

cin>>d;

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

{

cout<<"\nEnter the Destination: ";

cin>>f;

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

{

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

{

if(i==s)

{

if(j==f)

{

arr[i][j]=1;

}

}

}

}

}

}

void print(int n)

{

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

{

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

{

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

}

cout<<endl;

}

}

void insert\_city(int no)

{

int c;

int d;

int f;

cout<<"\nEnter the city name: \n";

cin>>c;

int a = no++;

cout<<"\nEnter the total no of Destination\n";

cin>>d;

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

{

cout<<"\nEnter the Destination: ";

cin>>f;

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

{

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

{

if(i==c)

{

if(j==f)

{

arr[i][j]=1;

}

}

}

}

}

}

};

int main()

{

list l1;

int no;

cout<<"\nEnter the total No. of Sources\n";

cin>>no;

for(int i=0;i<no;i++)

{

l1.input(no);

}

l1.print(no);

l1.insert\_city(no);

}