#include <iostream>

using namespace std;

int a[10][10],v[10],n,p=-1,vertix[10];

void dfs(int i)

{int j;

v[i]=1;

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

{

if(a[i][j]==1 && v[j]==0)

dfs(j);

}vertix[++p]=i;

cout<<i<<" ";

}

int main()

{

int i,j,count=0;

cout<<"enter the number of nodes"<<endl;

cin>>n;

cout<<"enter the adjacency matrix"<<endl;

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

{ v[i]=0;

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

cin>>a[i][j];

}

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

{

if(v[i]==0)

{ count++;

dfs(i);

cout<<endl;

}

}

if(count==1)

cout<<"connected"<<endl;

else

cout<<"disconnected"<<endl;

return 0;

}