#include <iostream>

using namespace std;

int main()

{

int i, j, k;

int n;

int a[10][10]; //adjacency matrix

int indeg[10], visited[10], c = 0;

cout << "Number of vertices: " << endl;

cin >> n;

cout << "Enter adjacency matrix: " << endl;

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

{

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

{

cin >> a[i][j];

}

}

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

{

visited[i]=0;

indeg[i]=0;

}

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

{

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

{

indeg[i]=indeg[i]+a[i][j];

}

}

cout << "Topological order: " << endl;

while(c<n)

{

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

{

if((indeg[k]==0) && (visited[k]==0))

{

cout << k+1 << "-->";

visited[k] = 1;

}

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

{

if(a[i][k] == 1)

{

indeg[k]--;

}

}

}

c++;

}

return 0;

}