#include <iostream>

#include <fstream>

#include <stdio.h>

#include <iomanip>

using namespace std;

#define MAX 20

int a[MAX][MAX];

int n;

char vertex[MAX];

void bfs(int n, vector<vector<int>>& edgelist, vector<int>& dist, queue<int>& q)

{

for (int i : edgelist[n])

{

if (dist[i] != -1) continue;

dist[i] = dist[n] + 1;

q.push(i);

}

if (!q.empty())

{

n = q.front();

q.pop();

bfs(n, edgelist, dist, q);

}

}