#include <iostream>

#include <vector>

#include <climits>

using namespace std;

struct Edge {

int src, dest, weight;

};

vector<int> bellmanFord(int V, int E, vector<Edge>& edges, int src) {

vector<int> distance(V, INT\_MAX);

distance[src] = 0;

for (int i = 1; i <= V - 1; ++i) {

for (const Edge& edge : edges) {

int u = edge.src;

int v = edge.dest;

int weight = edge.weight;

if (distance[u] != INT\_MAX && distance[u] + weight < distance[v])

distance[v] = distance[u] + weight;

}

}

for (const Edge& edge : edges) {

int u = edge.src;

int v = edge.dest;

int weight = edge.weight;

if (distance[u] != INT\_MAX && distance[u] + weight < distance[v]) {

cout << "Đồ thị chứa chu trình âm." << endl;

return {};

}

}

return distance;

}