```cpp
#include <bits/stdc++.h>
const int INF = 1e9;
const int MOD = 1e9+7;
const long long LINF = 1e18;
#define dump(x)  cout << 'x' << ' = ' << (x) << ` `;
#define FOR(i,a,b) for(int i=(a);i<(b);++i)
#define REP(i,n) for(int i=0;i<(n);++i)
#define REPR(i,n) for(int i=n;i>=0;i--)
#define FOREACH(x,a) for(auto& (x) : (a) )
typedef long long ll;
using namespace std;

struct edge {int from, to, cost;};
int MAX_V;

vector<edge> es;
int d[100010];
int V, E;

void bellman_ford(int s) {
    REP(i,V) d[i] = INF;
    d[s] = 0;
    while(true){
        bool update = false;
        for (auto& x: es) {
            edge e = x;
            if (d[e.from] != INF && d[e.to] > d[e.from] + e.cost) {
                d[e.to] = d[e.from] + e.cost;
                update = true;
            }
        }
        if (!update) break;
    }

}


```