#include <stdio.h>

//Cau truc de luu mot duong di giua hai thanh pho

//Di tu thanh pho u toi thanh pho v va do dai la len

struct Road {

int u;

int v;

int len;

};

//Cau truc de luu ban do

//Ban do gom n thanh pho va m canh 2 chieu

//roads la mang luu cac doan duong

//Moi doan duong hai chieu duoc luu thanh 2 doan duong 1 chieu cung do dai

struct Map {

int n, m;

Road \* roads;

};

//In lo trinh

void PrintRoute(Road \* route, int n) {

printf("[%d]", route[0].u);

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

printf("--%d-->[%d]", route[i].len, route[i].v);

printf("\n");

}

//Liet ke lo trinh bang de quy

void ListRoute(Map m, int source, int dest, bool \* visited, Road \* route, int n) {

if (source == dest) {

PrintRoute(route,n);

return;

}

visited[source] = true;

for (int i = 0; i < 2\*m.m; i++) {

if (m.roads[i].u == source) {

int next = m.roads[i].v;

if (visited[next]) continue;

route[n] = m.roads[i];

ListRoute(m, next, dest, visited, route, n+1);

}

}

visited[source] = false;

}

//Ham khoi tao de goi ham liet ke

void ListRoute(Map m, int source, int dest) {

bool \* visited = new bool[m.n];

for (int i = 0; i < m.n; i++) visited[i] = false;

Road \* route = new Road[m.n];

ListRoute(m,source,dest,visited,route,0);

delete [] visited;

delete [] route;

}

//Phan chuong trinh chinh, khong can viet khi thi

int main() {

FILE \* f = fopen("Map.txt","r");

Map m;

//Doc so thanh pho va so duong di

fscanf(f,"%d%d",&m.n, &m.m);

//Moi canh 2 chieu luu thanh 2 canh 1 chieu

m.roads = new Road[m.m\*2];

for (int i = 0; i < m.m; i++) {

int u, v, len;

fscanf(f,"%d%d%d", &u, &v, &len);

m.roads[i] = {u,v,len};

m.roads[i+m.m] = {v,u,len};

}

//Doc thanh pho S va D

int S, D;

fscanf(f,"%d%d",&S, &D);

ListRoute(m,S,D);

}