#include<bits/stdc++.h>

using namespace std;

void addEdge(int x, int y, int w, vector<vector<pair<int,int> > > &v){

v[x].push\_back(make\_pair(y,w));

v[y].push\_back(make\_pair(x,w));

}

void print(vector<vector<pair<int,int> > > &graph){

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

cout<<i<<"->";

// pair<int,int> end = x.second;

// cout<<start<<"->";

for(auto it = graph[i].begin(); it!=graph[i].end(); it++){

cout<<it->first<<" "<<it->second<<",";

}

cout<<endl;

}

}

int main(){

int n,e;

cin>>n>>e;

vector<vector<pair<int,int> > > graph;

graph.resize(n+1);

while(e--){

int x,y,w;

cin>>x>>y>>w;

addEdge(x,y,w,graph);

}

print(graph);

}