#include **<iostream>**#include **<stdint.h>**#include **<vector>**#include **<cstring>  
  
using namespace** std;  
  
*//const long long mx=(1<<63)-1;  
//long long int h[mx][64];* **bool** visited[104];  
**int** parent[100];  
**int** start[100];  
**int** finish[100];  
**int** counter=0;  
vector<**int**> arr[100];  
**bool** dfs(**int** u,**int** t){  
 **if**(u==t){  
 start[u]=counter++;  
 finish[u]=counter++;  
 **return true**;  
 }  
 start[u]=counter++;  
 visited[u]=**true**;  
 **for**(**int** i=0;i<arr[u].size();i++ ){  
 **int** v=arr[u][i];  
 **if**(!visited[v]){  
 parent[v]=u;  
 dfs(v,t);  
 }  
 }  
 finish[u]=counter++;  
 **return false**;  
}  
**void** print\_path(**int** s,**int** t){  
 **if**(s==t){  
 cout<<t<<**" -> "**;  
 **return**;  
 }  
 print\_path(s,parent[t]);  
 cout<<t<<**" -> "**;  
}  
  
**int** main() {  
 **int** n;cin>>n;  
 **for**(**int** i=0;i<n;i++){  
 **int** u;cin>>u;  
 **int** v;cin>>v;  
 arr[u].push\_back(v);  
 }  
 *//memset(visited,false, sizeof(visited));* **for**(**int** i=0;i<n;i++){  
 parent[i]=i;  
 visited[i]=**false**;  
 start[i]=-1;  
 finish[i]=-1;  
 }  
 dfs(0,n-1);  
 print\_path(0,n-1);  
 **for**(**int** i=0;i<n;i++){  
 cout<<endl<<start[i]<<**" - "**<<finish[i]<<endl;  
 }  
 **return** 0;  
}