

```

1  /** Uva 11504- Dominos:
2  Given the layout of some domino tiles, Your task is to determine, the minimum number of dominos
3  that must be knocked down by hand in order for all of the dominos to fall.
4
5  The first line of input contains one integer specifying the number of test cases to follow.
6  Each test case begins with a line containing two integers, each no larger than 100000.
7  The first integer n is the number of domino tiles and the second integer m is the number of
8  lines to follow in the test case. The domino tiles are numbered from 1 to n.
9  Each of the following m lines contains two integers x and y indicating that if domino number
10 x falls, it will cause domino number y to fall as well.
11
12 For each test case, output a line containing one integer, the minimum number of dominos
13 that must be knocked over by hand in order for all the dominos to fall.
14 */
15 #include<bits/stdc++.h>
16 using namespace std;
17 #define mx 100005
18 vector<int>ed[mx];
19 stack<int>st;
20 bool vis[mx];
21 void TOPSORT(int u){
22     vis[u]=true;
23     for(int i=0; i<ed[u].size(); i++){
24         int v = ed[u][i];
25         if(vis[v]==false) TOPSORT(v);
26     }
27     st.push(u);
28 }
29 void DFS(int u){
30     vis[u]=true;
31     for(int i=0; i<ed[u].size(); i++){
32         int v = ed[u][i];
33         if(vis[v]==false) DFS(v);
34     }
35 }
36 int main(){
37     int tt; scanf("%d",&tt);
38     for(int ks=1; ks<=tt; ks++){
39         int n,m; scanf("%d%d",&n,&m);
40
41         for(int i=1; i<=m; i++){
42             int u,v; scanf("%d%d",&u,&v);
43             ed[u].push_back(v);
44         }
45
46         memset(vis,false,sizeof(vis));
47         for(int i=1; i<=n; i++){
48             if(vis[i]==false){
49                 TOPSORT(i);
50             }
51         }
52
53         int ans = 0;
54         memset(vis,false,sizeof(vis));
55
56         while(!st.empty()){
57             int u = st.top(); st.pop();
58             if(vis[u]==false){
59                 ans++;
60                 DFS(u);
61             }
62         }
63         printf("%d\n",ans);
64
65         for(int i=1; i<=n; i++)ed[i].clear();
66     }
67     return 0;
68 }

```