**Articulation Point, bi-directional, O(V+E)**

**Tested on: lightOJ 1063 - Ant Hills**

int t, dis[MX], low[MX], parent[MX];

bool isArti[MX];

void findAP(int u, int root)

{

low[u] = dis[u] = ++t;

vis[u]=true;

int children=0;

for(int i=0;i<adj[u].size();i++)

{

int v=adj[u][i];

if(!vis[v])

{

children++;

parent[v]=u;

findAP(v, root);

low[u]=min(low[u], low[v]);

if(u==root && children>1) isArti[u]=true; //special check for root

else if(u!=root && low[v]>=dis[u]) isArti[u]=true;

}

else if(parent[u]!=v)

low[u]=min(low[u], dis[v]);

}

return;

}

for(int i=1;i<=n;i++)

if(!vis[i]) findAP(i, i);