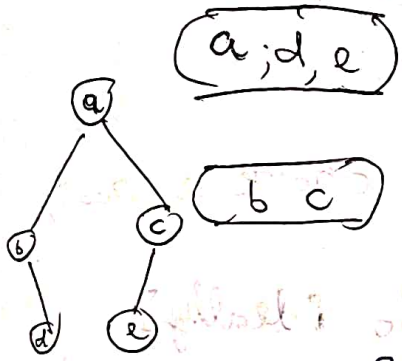
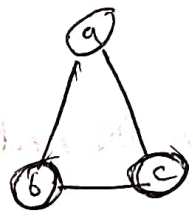
(Bipartite graph)

So by definition, it means that you can group the nodes into two groups. Condition is, if there is a branch a — b, then (a and b) should be in different groups.



a ; d, e

b c



a c → But a — c also there is a branch, so we cannot place c in any group such that it following the condition.

b

This is bipartite

Soln

We can do bfs. Starting from any node, start at node x

color[x] = 0, then child nodes of this will have color[child] = 1 − color[x]. If at anytime color[child] is = to color[x] then not bipartite