## **Handwritten Problem**

Given an undirected connected graph, check if the graph contains a cycle.

bool is\_graph\_cyclic(const vector<vector<int>>& adj\_list);

Feel free to use a helper function!

You can assume that if u and v are adjacent, then adj\_list[u] will contain v and adj\_list[v] will contain u. Also, u will not appear in adj\_list[u].

**Complexity:** O(V + E) time