Trees in a Forest

Given n nodes of a forest (collection of trees), find the number of trees in the forest.

Note: Explore the concept of DFS

Input Format:

First line, denotes the number of nodes
Second line, ‘s’ denotes the number of edges
Next subsequent s lines denotes the edges

Output Format:

A positive integer, denoting the number of trees.

Solution:

```
adj = [[] for _ in range(10009)]
def addEdge(adj, u, v):
        adj[u].append(v)
        adj[v].append(u)

def DFSUtil(u, adj, visited):
        visited[u] = True
        for i in range(len(adj[u])):
                if (visited[adj[u][i]] == False):
                        DFSUtil(adj[u][i], adj, visited)


def countTrees(adj, V):
        visited = [False] * V
        res = 0
        for u in range(V):
                if (visited[u] == False):
                        DFSUtil(u, adj, visited)
                        res += 1
        return res



v = int(input())
```

```
e=int(input())
for i in range(e):
    x,y = map(int,input().split())
    addEdge(adj,x,y)
print(countTrees(adj, v))
```