

We can use a counter to store the number of connected components and an array to represent whether a node is visited or not. First, we randomly choose one not-yet-visited node and increment the counter. And then from this node apply depth-first search (DFS) and mark all visited nodes. After all nodes are visited, continue depth-first search (DFS) with another not-yet-visited node and increment the counter as before. The counter is exactly the result.