Algorithm: IsReachable

Input: Undirected graph g = (V,E); node i is an element of V, node j is an element of V

Output: True if there is a path from node i to node j, false if there is not a path from node i to node j

1. (d,p,W) 🡨 BFS(g, i)
2. If dj = Null then
   1. Return False
3. Return True

Algorithm: ConnectedComponents

Input: undirected graph g = (V,E)

Output: an array C of arrays that contains all the connected components in graph g.

1. Initialize C to an empty array
2. N 🡨 V
3. While |N| > 0:
   1. i 🡨 random node from N
   2. (d,p,W) 🡨 BFS(g, i)
   3. C union W
   4. N 🡨 N \ {W}
4. Return C