Algorithm: DFS Level numbering : A simple connected undirected graph G = (V,E)

Output: An array indexed with vertices containing level numbering

Initialize a Queue Q.

Initialize an array Level[1..n] with value -1.

Pick a starting vertex s

Level[s] ← 0.

Q.add(s)

while S ≠ ∅ do

v ← S.dequee()

level<- Level[v]+1

For all vertices adjacent to w with Level[v]==-1

Level[w] <-level

Q.add(w)

else

return level