DFS(G)

1 **for** each vertex $u \in G.V$
2      $u.color = \text{WHITE}$
3      $u.\pi = \text{NIL}$
4 $time = 0$
5 **for** each vertex $u \in G.V$
6   **if** $u.color == \text{WHITE}$
7   DFS-VISIT(G, u)

DFS-VISIT(G, u)

1 $time = time + 1$ **//** white vertex u has just been discovered
2 $u.d = time$
3 $u.color = \text{GRAY}$
4 **for** each vertex v in $G.Adj[u]$ **//** explore each edge (u, v)
5   **if** $v.color == \text{WHITE}$
6          $v.\pi = u$
7   DFS-VISIT(G, v)
8 $time = time + 1$
9 $u.f = time$
10 $u.color = \text{BLACK}$ **//** blacken u; it is finished