Depth-First Search

```
DFS(G,s)
1   time ← 1
2       Push(S,s)
3       D[s] ← time
4       while S ≠ 0
5           do u ← top(S)    // u still on the top of S //
6               if  there is undiscovered neighbors  v of u
7                       then
8                           time ← time+1
9                           Push(S,v)
10                          d[v] ← time
11                      else
12                          time ← time+1
13                          Pop(S,u)
14                          f[u] ← time
```

d[*i*] is the discovery time if node *i*

f[*i*] is the finishing time of node *I*

S is a stack