

```

G.DFS()

for each vertex v
    v.visited = false
    v.start   = infty
    v.finish  = infty
    v.parent  = null

time = 0

for each vertex x
    if (x is not visited) DFS-visit(x)

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DFS-visit(vertex v) {

    v.visited = true
    time++
    v.start = time

    for each neighbor w of v {

        if (w is not visited) {
            w.parent = v
            DFS-visit(w)

        else {

            if (                ) // back edge

            if (                ) // forward edge

            if (                ) // cross edge

        }

    }

    time++
    v.finish = time

}

```