

```
procedure DFSblue(s)
  s.blue := true
  for all t ∈ post(s) do
    if ¬t.blue then DFSblue(t)
  if s ∈ Accepting then
    seed := s
    DFSred(s)
```

```
procedure DFSred(s)
  s.red := true
  for all t ∈ post(s) do
    if t = seed then ExitCycle
    if ¬t.red then DFSred(t)
```

Nested DFS

- ▶ Blue search
 - ▶ Visits all reachable states
 - ▶ Starts Red search on accepting states (seed)
in post order
- ▶ Red Search
 - ▶ Finds cycle through seed
 - ▶ Visits states at most once
- ▶ Linear time, on-the-fly
- ▶ Blue is inherently depth-first