

Strongly Components

```
for all x in vertices of G do visited[x]  $\leftarrow$  FALSE
i  $\leftarrow$  0
for all x in vertices of G do
    if not visited[x] then finish(x)
end for
```

```
procedure finish(x)
    visited[x]  $\leftarrow$  TRUE
    for all y adjacent to x do
        if not visited[y] then finish(y)
    end for
    i  $\leftarrow$  i+1
    f[x]  $\leftarrow$  i
end procedure
```

REVERSE_EDGES(G)

```
for all x in vertices of G do scc_num[x]  $\leftarrow$  0
j  $\leftarrow$  0
for all x in vertices of G do
    if scc_num[x]=0 then
        j  $\leftarrow$  j+1
        scc(x)
    end if
end for
```

```
procedure scc(x)
    scc_num[x]  $\leftarrow$  j
    for all y adjacent to x do
        if scc_num[y]=0 then scc(y)
    end for
end procedure
```