

## Correction to the stack-based postorder traversal of a binary tree on page 8 of the notes on trees

The algorithm for stack-based postorder traversal on page 8 of the scribed notes for COMP 251 is wrong. While we await correction by the author, here is the way to do it using a flag.

[Stack based postorder traversal of tree  $t$ .]

```
makenull ( $S$ ) (where  $S$  is a stack)
push ( $(t, 1), S$ ) (where  $t$  is the root of the binary tree)
while  $|S| > 0$  do:
    ( $v, b$ )  $\leftarrow$  pop ( $S$ )
    if  $b = 1$  then push ( $(v, 0), S$ )
        if right [ $v$ ]  $\neq$  nil, then push ( $(\text{right}[v], 1), S$ )
        if left [ $v$ ]  $\neq$  nil, then push ( $(\text{left}[v], 1), S$ )
    else visit ( $v$ )
```