

**CSC 383, Sections 401 and 410**  
**Fall, 2011**  
**Assignment 2**  
**Pseudocode for parsing algorithm**

Here is a pseudocode version of the simple parsing algorithm to use in assignment 2.

```
create an empty tag stack
set indent level to 0
for each token {
  if (the token is an opening tag) {
    print indenting
    print token
    push token onto the tag stack
    increase indent level
  }
  else if (the token is a closing tag) {
    decrease indent level
    print indenting
    print token
    if (the tag stack is empty) {
      print an error message: a closing tag has no matching
        opening tag
      exit
    }
    pop off tag stack into opening tag
    if (the token's tag name is not equal to the opening
      tag's name) {
      print an error message: a closing tag does not match
        its opening tag
      exit
    }
  }
  else {
    print indenting
    print token
  }
}
if (the tag stack is not empty) {
  print an error message: there are opening tags with no
    matching closing tags
}
```

## CSC 383, Fall 2011, Assignment 2 pseudocode

Use the Java API Stack class for the tag stack. I suggest writing methods for:

- Determining whether a token is an opening tag
- Determining whether a token is a closing tag
- Retrieving the name of a tag

Others may occur to you.