

Homework Assignment #2

Due: Friday, October 22

Do the following exercises from the textbook: 3.2, 3.3cdfg, 3.4, 3.12ab

In addition, do the following exercises:

1. Consider the following MiniJava statement:

```
while (x < 3+4*5) {  
    System.out.println(x);  
    y = new C().test(a,b,c);  
}
```

- a. Draw the concrete syntax tree for this statement. Use the MiniJava grammar embedded in the `Parser/minijava.cup` file. (You may abbreviate non-terminal names if unambiguous, e.g. `Id` for `Identifier`.)
- b. Draw the abstract syntax tree for this statement, labelling each AST node with the name of an AST node class from the MiniJava compiler and labelling each child edge with the name of an instance variable of the parent node's class. (Child edges that lead to non-AST nodes, such as integers or strings, can be drawn to lead to a particular integer or string value.)

Produce a hard-copy of your answers and turn them in to the TA by the start of class on the due date.

Do these exercises individually, not with your project partner.