Lab Six

Marcus A. Zimmermann

Marcus.Zimmermann1@Marist.edu

March 25, 2018

Crafting a Compiler

Exercise 9.2

Assume that we add a new kind of conditional statement to C or Java, the signtest. Its structure is:

```
1 signtest (exp) {
2     neg: stmts
3     zero: stmts
4     pos: stmts
5 }
```

The integer expression exp is evaluated. If it is negative, the statements following neg are executed. If it is zero, the statements following zero are executed. If it is positive, the statements following pos are executed.

Show the AST you would use for this construct. Revise the semantic analysis, reachability, and throws visitors for if statements (Section 9.1.2) to handle the signtest.