**Compiling While**

Assume the compilation of c will generate a sequence that will leave 0 or 1 on the stack, expressing the truth value of c:

[[ while(c) s ]] =

nStart: [[c]]

if\_eq nAfter

[[s]]

goto nStart

nAfter: ...

**Example**

Java code:

class Test {

static boolean condition(int n) { ... }

static void work(int n) { ... }

static void test() {

int n = 100;

while (condition(n)) {

n = n - 11;

work(n);

}

}

}

Bytecodes for test():

static void test();

Code:

0: bipush 100

2: istore\_0

3: iload\_0

4: invokestatic #4; //Method condition:(I)Z

7: ifeq 22

10: iload\_0

11: bipush 11

13: isub

14: istore\_0

15: iload\_0

16: invokestatic #5; //Method work:(I)V

19: goto 3

22: return

See also [Compiled Counting Examples](http://lara.epfl.ch/w/cc09:compiled_counting_examples)