

Iterating Statements

Script generated by TTT

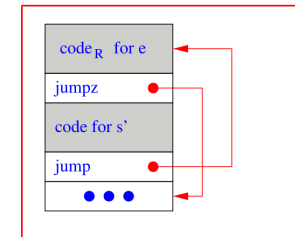
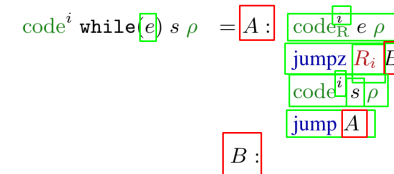
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We only consider the loop $s \equiv \text{while } (e) s$. For this statement we define:



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Example: Translation of Loops

Let $\rho = \{a \mapsto 7, b \mapsto 8, c \mapsto 9\}$ and let s be the statement:

```
while (a>0) {
  c = c + 1;
  a = a - b;
}
```

/* (i) */
 /* (ii) */
 /* (iii) */

Then codeⁱ s ρ evaluates to:

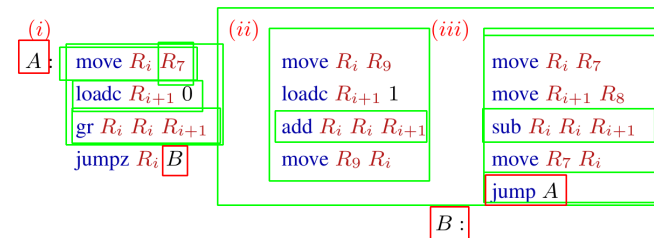
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for-Loops

The **for**-loop $s \equiv \text{for } (e_1; e_2; e_3) s'$ is equivalent to the statement sequence $e_1; \text{while } (e_2) \{s' e_3;\}$ as long as s' does not contain a **continue** statement.

Thus, we translate:

