

Quiz 6

In your JOOS compiler you implemented the “for” statement as syntactic sugar, thus, you didn’t need to extend the type checker.

Write the logical type rule for the “for” statement:

`for (S; E; S) S`

$$L, C, M, V \vdash S_{init}$$
$$L, C, M, V \vdash E : \mathbf{boolean}$$
$$L, C, M, V \vdash S_{increment}$$
$$L, C, M, V \vdash S_{body}$$

$$L, C, M, V \vdash \mathbf{for} \ (S_{init}; E; S_{increment}) S_{body}$$