

Question 2

The biggest disadvantage of this implementation is that it will be almost impossible to implement the checks that are needed to be done in Runtime, since the call for `invariant()` is injected during the class load. So any JRE states are not available since the code isn't executed yet. We can't check who called the method if it hasn't been called yet!

It would be possible to simply inject the entire `check()` bytecode into the end of each method, but this practically saves nothing (besides several register assignments and “goto” instructions). It would also be extremely inconvenient for maintenance and future modifications, and the injection will have to take into consideration existing labels in the checkable method bytecode (e.g. local variable names or method calls collisions).