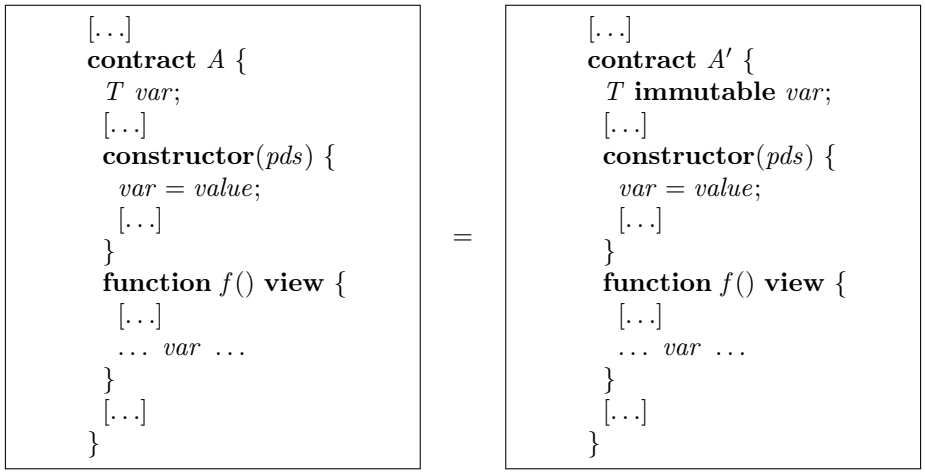
Rule 0.14 ⟨*Use Immutable Variables for Constructor-Set Values*⟩



where

var is a state variable of type T in contract A;

value is an expression evaluated during contract construction;

pds are the constructor parameter declarations;

f is a function that reads *var*.

provided

The variable *var* is assigned exactly once in the constructor;

The variable *var* is never modified after construction;

The type T supports immutable declaration in Solidity;

No write operations to *var* exist outside the constructor;

The value assigned to *var* can be determined at deployment time.

Invariant:

Let s_i and s_i' be the initial state of A and A', respectively.

Let s_f and s_f' be the state reached by A and A', respectively, after $A.f()$ and $A'.f()$ are executed from s_i and s_i', respectively.

Then, the coupling invariant is

$$\forall\, s_i, s_i' \;.\; (s_i = s_i') \rightarrow (s_f = s_f')$$