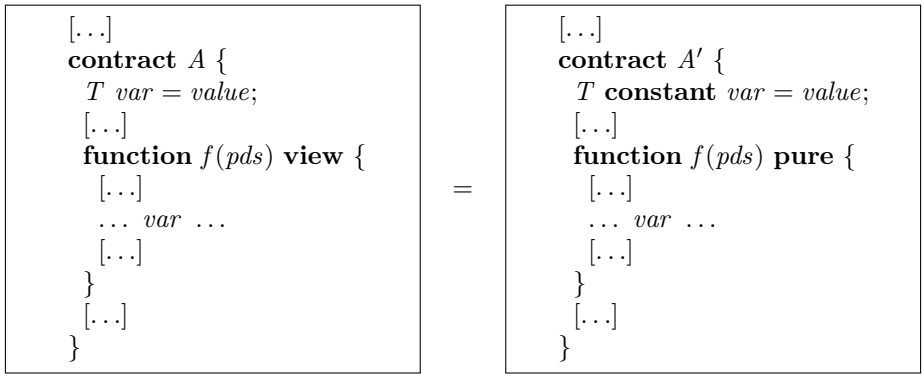
Rule 0.13 ⟨*Use Constant Variables for Unchanging Values*⟩



where

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

value is a compile-time constant expression that initializes *var*;

f is a function that reads *var*;

pds are the parameter declarations of function f.

provided

The variable *var* is never modified after initialization;

The value *value* is known at compile time and does not depend on runtime state;

All functions reading *var* can be changed from **view** to **pure** if they only access constant variables;

The type T supports constant declaration in Solidity;

No write operations to *var* exist anywhere in the contract.

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

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