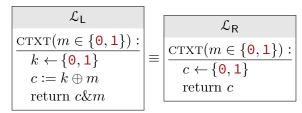
My Hybrid Proof

You can write your homework completely in HybLang! You can even put raw IATEXin the annotations in HybLang! Is it just me or is

$$\pi \approx 3!$$

We are tasked to show that



are interchangeable. This obviously not the case, since the distinguishing program

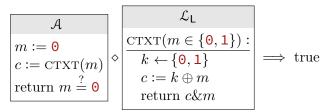
$$\mathcal{A}$$

$$m := \mathbf{0}$$

$$c := \text{CTXT}(m)$$

$$\text{return } m \stackrel{?}{=} \mathbf{0}$$

always returns true when linked to library L. Since we have



and

$$\begin{array}{l}
\mathcal{A} \\
m := \mathbf{0} \\
c := \text{CTXT}(m) \\
\text{return } m \stackrel{?}{=} \mathbf{0}
\end{array}$$

$$\diamond \frac{\mathcal{L}_{R}}{\overset{\text{CTXT}}{(m \in \{\mathbf{0}, \mathbf{1}\})} :}}{\overset{\text{CTXT}}{(c \leftarrow \{\mathbf{0}, \mathbf{1}\})}} \implies \frac{1}{2}$$

so we know that

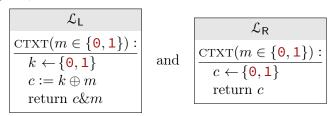
$$\mathcal{A}$$

$$m := \mathbf{0}$$

$$c := \text{CTXT}(m)$$

$$\text{return } m \stackrel{?}{=} \mathbf{0}$$

is a distinguishing program, so it is not the case that



are interchangeable, thus proving a counterexample of the claim.