

The Curry-Howard correspondence

Haskell	Logic
type variables : a	proposition variables : p
types : <code>Bool</code>	propositions : “Socrates is a man”
function types : $a \rightarrow b$	implications (implies) : $p \rightarrow q$
tuples : (a, b)	conjunctions (and) : $p \wedge q$
either : <code>Either</code> $a\ b$	disjunctions (or) : $p \vee q$
type inhabitation : $\text{id} :: a \rightarrow a$	truth : $\models p \rightarrow p$