The Curry-Howard correspondence

Haskell	Logic
type variables : a	proposition variables : p
types : Bool	propositions : "Socrates is a man"
function types : $a \rightarrow b$	implications (implies) : $p o q$
tuples : (a, b)	conjunctions (and) : $p \wedge q$
either : Either a b	disjunctions (or) : $p \lor q$