$$\overbrace{1+2}^{\text{Term}} : \overbrace{\text{Int}}^{\text{Type}}$$

$$\underbrace{\text{p}}_{\text{Proof}} : \underbrace{\text{P}}_{\text{Prop}}$$

* Proving a proposition $\Longleftrightarrow$ constructing a term of the corresponding type
* Checking a proof for correctness $\Longleftrightarrow$ type checking
* Simply types $\Longleftrightarrow$ Intuitionistic propositional logic
* Dependent types $\Longleftrightarrow$ Intuitionistic predicate logic