stlc

Syntax

t ::= term

 $\lambda x.y$ type abstraction

Evaluation

$$\frac{\text{t1} \rightarrow \text{tp1;}}{\text{t1 t2} \rightarrow \text{tp1 t2}} \text{ APP1}$$

$$\frac{\text{t1} \rightarrow \text{tp1;}}{\text{t1 t2} \rightarrow \text{tp1 t2}} \text{ APP2}$$

$$\frac{\text{t1} \rightarrow \text{tp1;}}{\text{t1 t2} \rightarrow \text{tp1 t2}} \text{ APP3}$$

Typing

$$\frac{t1:T1\rightarrow T2;t2:T1;}{t1\ t2:T1}\ TYP1$$

$$\frac{t1:T1\rightarrow T2;t2:T1;}{t1\ t2:T1}\ TYP2$$