$bool \triangleq \forall t.\, t \to t \to t$

$tt \triangleq \lambda(x)\,\lambda(y)\,x$

$tt \triangleq \Lambda(t)\,\lambda(x{:}t)\,\lambda(y{:}t)\,x$

$ff \triangleq \lambda(x)\,\lambda(y)\,y$

$ff \triangleq \Lambda(t)\,\lambda(x{:}t)\,\lambda(y{:}t)\,y$

$\text{if } e \text{ then } e_t \text{ else } e_f \triangleq$

$e\,(e_t)\,(e_f)$

$\text{if } e \text{ then } e_t \text{ else } e_f \triangleq$

$\underbrace{e[\tau]}_{\tau\to\tau\to\tau}\,(e_t)\,(e_f)$ (τ is the type of e_t and e_f)

$\tau_1 + \tau_2 \triangleq \forall t.\,(\tau_1 \to t) \to (\tau_2 \to t) \to t$

$inl(e) \triangleq \lambda(f)\,\lambda(g)\,f(e)$

$\Lambda(t)\,\lambda(f{:}\tau_1 \to t)\,\lambda(g{:}\tau_2 \to t)\,f(e)$

$inr(e) \triangleq \lambda(f)\,\lambda(g)\,g(e)$

$\Lambda(t)\,\lambda(f{:}\tau_1 \to t)\,\lambda(g{:}\tau_2 \to t)\,g(e)$

$case\,(e)\,\{inl\ x \Rightarrow e_l \mid inr\ y \Rightarrow e_r\} \triangleq$

$e\,(\lambda(x)e_l)\,(\lambda(y)\,e_r)$

$e[\tau]\,\underbrace{(\lambda(x{:}\tau_1)e_l)}_{\tau_1\to\tau}\,(\lambda(y{:}\tau_2)e_r)$

$nat \triangleq \forall t.\, t \to (t \to t) \to t$

$z \triangleq \lambda(x)\,\lambda(f)\,x$

$z \triangleq \Lambda(t)\,\lambda(b{:}t)\,\lambda(s{:}t \to t)\,b$

$s(e) \triangleq \lambda(x)\,\lambda(f)\,f\,(e\,(x)(f))$

$s(e) \triangleq \Lambda(t)\,\lambda(b{:}t)\,\lambda(s{:}t\to t)\,s\,(e[t]\,b\,s)$

$iter(e_z; x.e_s; e) \triangleq e\,(e_z)\,(\lambda(x)\,e_s)$

$e[\tau]\,e_z\,(\lambda(x{:}\tau)\,e_s)$

$\tau_1 \times \tau_2 \triangleq \forall t.\,(\tau_1 \to \tau_2 \to \underline{t}) \to \underline{t}$

$e \cdot l \triangleq e\,(\lambda(x)\,\lambda(y)\,x)$ ← $\tau_1 \to \tau_2 \to \tau_1$

$e \cdot l \triangleq e[\tau_1]\,(\lambda(x{:}\tau_1)\lambda(y{:}\tau_2)\,x)$

$e \cdot r \triangleq e\,(\lambda(x)\,\lambda(y)\,y)$ ← $\tau_1 \to \tau_2 \to \tau_2$

$e \cdot r \triangleq e[\tau_2]\,(\lambda(x{:}\tau_1)\lambda(y{:}\tau_2)\,y)$

$\langle e_1, e_2 \rangle \triangleq \lambda(sel)\,sel\,(e_1)(e_2)$

$\langle e_1, e_2 \rangle \triangleq \Lambda(t)\,\lambda(sel{:}\tau_1 \to \tau_2 \to t)$ ← type τ_2

$sel\,(e_1)(e_2)$ ← type τ_1

$unit \triangleq \forall t.\, t \to t$

$triv \triangleq \Lambda t\,\lambda(x{:}t)\,x$

$void \triangleq \forall t.t$

$abort[\tau]\,e \triangleq e[\tau]$

$\exists t.\tau \triangleq \forall u.\,(\forall t.\,\tau \to u) \to u$ has type τ_2

$open[t.\tau](e_1)(t.x.e_2) \triangleq$

$e_1[\tau_2]\,\underbrace{(\Lambda(t)\,\lambda(x{:}\tau)\,e_2)}_{\text{need}:\ \forall t.\tau \to \tau_2}$

$pack[t.\tau][\rho]\,e \triangleq$ ← has type $[\rho/t]\tau$

$\Lambda(u)\,\lambda(c{:}\forall t.\,\tau \to u)$

$c[\rho]\,\underbrace{e}_{[\rho/t]\tau}$