

Expresión	Tipo	Sustitución
f	$\tau$	
x	$\rho$	
cmap	$\beta$	
cmap(f, x)	$\delta 1$	$\beta = \tau \times \rho \rightarrow \delta 1$
x	$\rho$	
null	list( $\alpha$ n) $\rightarrow$ bool	
null(x)	bool	$\rho = \text{list}(\alpha n)$
[]	list( $\alpha$ l)	
x	list( $\alpha$ n)	
head	list( $\alpha$ h) $\rightarrow$ $\alpha$ h	
head(x)	$\alpha$ h	$\alpha n = \alpha h$
f	$\tau$	
f(head(x))	$\delta 2$	$\tau = \alpha n \rightarrow \delta 2$

Expresión	Tipo	Sustitución
f	$\alpha n \rightarrow \delta 2$	
x	$\text{list}(\alpha n)$	
tail	$\text{list}(\alpha t) \rightarrow \text{list}(\alpha t)$	
tail(x)	$\text{list}(\alpha t)$	$\alpha n = \alpha t$
cmap	$\text{list}(\alpha n) \rightarrow \delta 2 \times \text{list}(\alpha n) \rightarrow \delta 1$	
cmap(f, tail(x))	$\delta 1$	
concat	$\text{list}(\alpha c) \times \text{list}(\alpha c) \rightarrow \text{list}(\alpha c)$	
concat(f(head(x)), cmap(f, tail(x)))	$\text{list}(\alpha c)$	$\delta 1 = \text{list}(\alpha c), \delta 2 = \text{list}(\alpha c)$
if	$\text{bool} \times \alpha i \times \alpha i \rightarrow \alpha i$	
if(null(x), [], concat(f(head(x)), cmap(f, tail(x))))	$\alpha i$	$\alpha i = \alpha c$
match	$\alpha m \times \alpha m \rightarrow \alpha m$	$\alpha n = \alpha h$
match(cmap(f,x),if(null(x), [], concat(f(head(x)), cmap(f, tail(x)))) )	$\alpha m$	$\alpha i = \text{list}(\alpha c)$

El tipo más general de la expresión es:

$\forall \alpha, \beta. (\alpha \rightarrow \text{list}(\beta)) \times \text{list}(\alpha) \rightarrow \text{list}(\beta)$