330 2013-11-05

Note Title 2013-11-05

!f : x ≡ if x = ⟨y⟩ then y ⇐

· else if x = ⟨x₁ x₂ ⋯ xₙ⟩, with n>1
then f ; ⟨x₁, !f : ⟨x₂ ⋯ xₙ⟩⟩

addvss : ⟨⟨1 2 3⟩ ⟨2 3 4⟩ ⟨4 5 6⟩⟩ =

addv : ⟨⟨1 2 3⟩, !addv : ⟨⟨2 3 4⟩ ⟨4 5 6⟩⟩⟩ =

$$= \text{addv}\,\langle\langle 1\ 2\ 3\rangle, \text{addv}\,\langle\langle 2\ 3\ 4\rangle, !\,\text{addv}\,\langle 4\ 5\ 6\rangle\rangle\rangle =$$

$$= \text{addv}\,\langle\langle 1\ 2\ 3\rangle, \text{addv}\,\langle(2\ 3\ 4), \langle 4\ 5\ 6\rangle\rangle\rangle =$$

$$= \text{addv}\,\langle(\langle 1\ 2\ 3\rangle), \langle 6\ 8\ 10\rangle\rangle =$$

$$= \langle 7\ 10\ 13\rangle$$

Type inference rule

$$\frac{f :: A \to B \qquad e :: A}{f\ e :: B}$$

Program 7 (PR7):

exercises 1-6 ch. ~~6~~ 4
3, 4, 7 from Ch. 5 due 11-14