

state-after-pred-ds^{0,22}

$\forall es:ES, ds:x:Id \text{ fp} \rightarrow \text{Type}, e:E.$

$(\forall x:Id. \text{vartype}(\text{loc}(e);x) \subseteq \rho \text{ } ds(x)?\text{Top})$

$\Rightarrow \neg \text{first}(e)$

$\Rightarrow \text{state after pred}(e) = (\text{state when } e) \in \text{State}(ds)$