

Variables	x, y, \dots	Prompts	$p, q \in N$
Expressions	$e ::= v \mid ee \mid \mathbf{newP} \mid \mathbf{pushP} ee \mid \mathbf{takeSC} ee \mid \mathbf{pushSC} ee$		
Values	$v ::= x \mid \lambda x. e \mid p \mid D$		
Contexts	$D ::= \square \mid De \mid vD \mid \mathbf{pushP} De \mid \mathbf{pushSC} De \mid \mathbf{takeSC} De$ $\mid \mathbf{takeSC} pD \mid \mathbf{pushP} pD$		
Single Frame	$::= \square e \mid v\square \mid \mathbf{pushP} \square e \mid \mathbf{pushSC} \square e \mid \mathbf{takeSC} \square e$ $\mid \mathbf{takeSC} p\square \mid \mathbf{pushP} p\square$		

Transitions between configurations (e, D, q)

$(ee', D, q) \mapsto (e, D[\square e'], q)$	e non-value
$(ve, D, q) \mapsto (e, D[v\square], q)$	e non-value
$(\mathbf{pushP} ee', D, q) \mapsto (e, D[\mathbf{pushP} \square e'], q)$	e non-value
$(\mathbf{takeSC} ee', D, q) \mapsto (e, D[\mathbf{takeSC} \square e'], q)$	e non-value
$(\mathbf{takeSC} pe, D, q) \mapsto (e, D[\mathbf{takeSC} p\square], q)$	e non-value
$(\mathbf{pushSC} ee', D, q) \mapsto (e, D[\mathbf{pushSC} \square e'], q)$	e non-value
$((\lambda x. e)v, D, q) \mapsto (e[v/x], D, q)$	
$(\mathbf{newP}, D, q) \mapsto (q, D, q + 1)$	
$(\mathbf{pushP} pe, D, q) \mapsto (e, D[\mathbf{pushP} p\square], q)$	
$(\mathbf{takeSC} pv, D, q) \mapsto (vD_1, D_2, q)$	$D_2[\mathbf{pushP} pD_1] = D, \mathbf{pushP} pD' \notin D_1$
$(\mathbf{pushSC} D'e, D, q) \mapsto (e, D[D'], q)$	
$(v, D[D_1], q) \mapsto (D_1[v], D, q)$	D_1 single frame
$(\mathbf{pushP} pv, D, q) \mapsto (v, D, q)$	