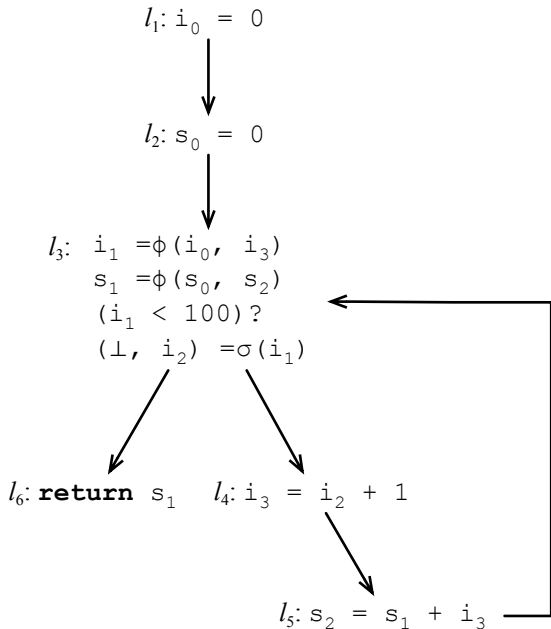


(a)



(b)

$[i_0] = [0, 0]$
 $[i_1] = [0, 100]$
 $[i_2] = [0, 99]$
 $[i_3] = [1, 100]$
 $[s_0] = [0, 0]$
 $[s_1] = [0, +\infty]$
 $[s_2] = [1, +\infty]$