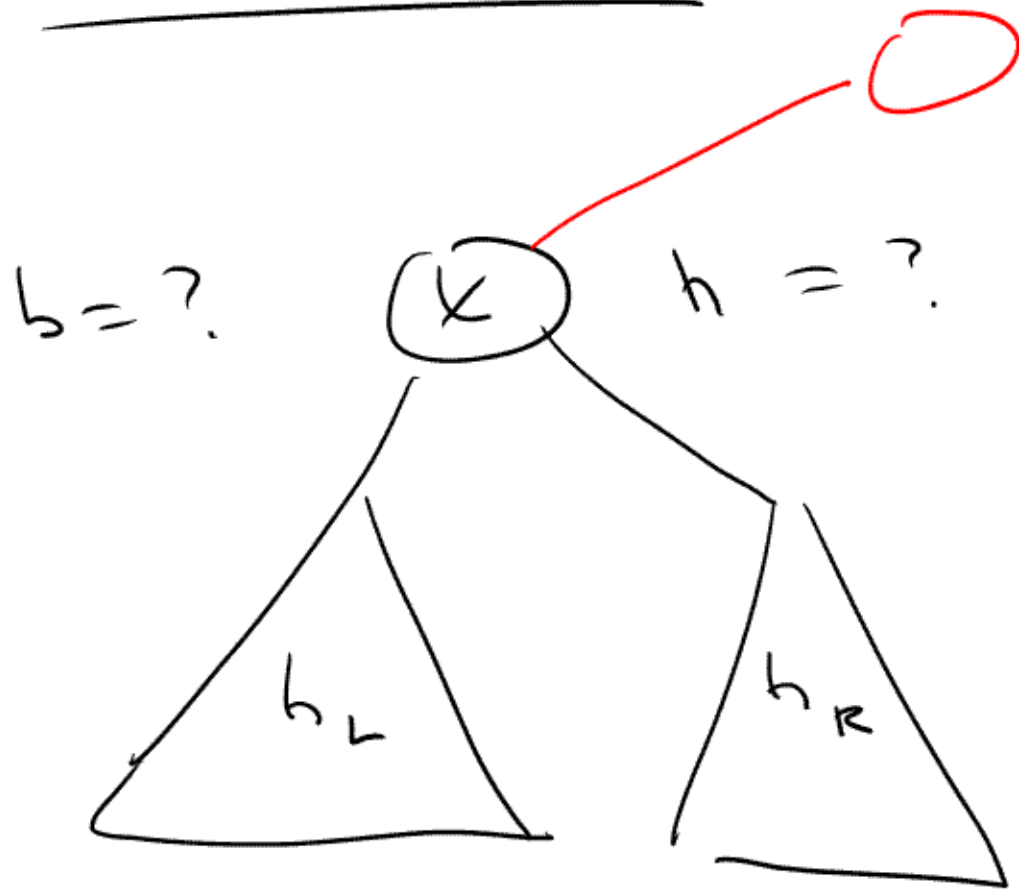


AVL Trees



height of
every node
stored in
that node

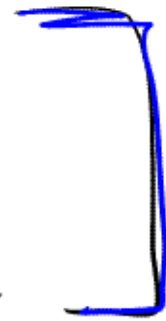
$$h_x = \max \{h_L, h_R\} + 1$$

$$b_x = h_R - h_L$$

Rotations

right, left

single, double



1) SR

2) SL

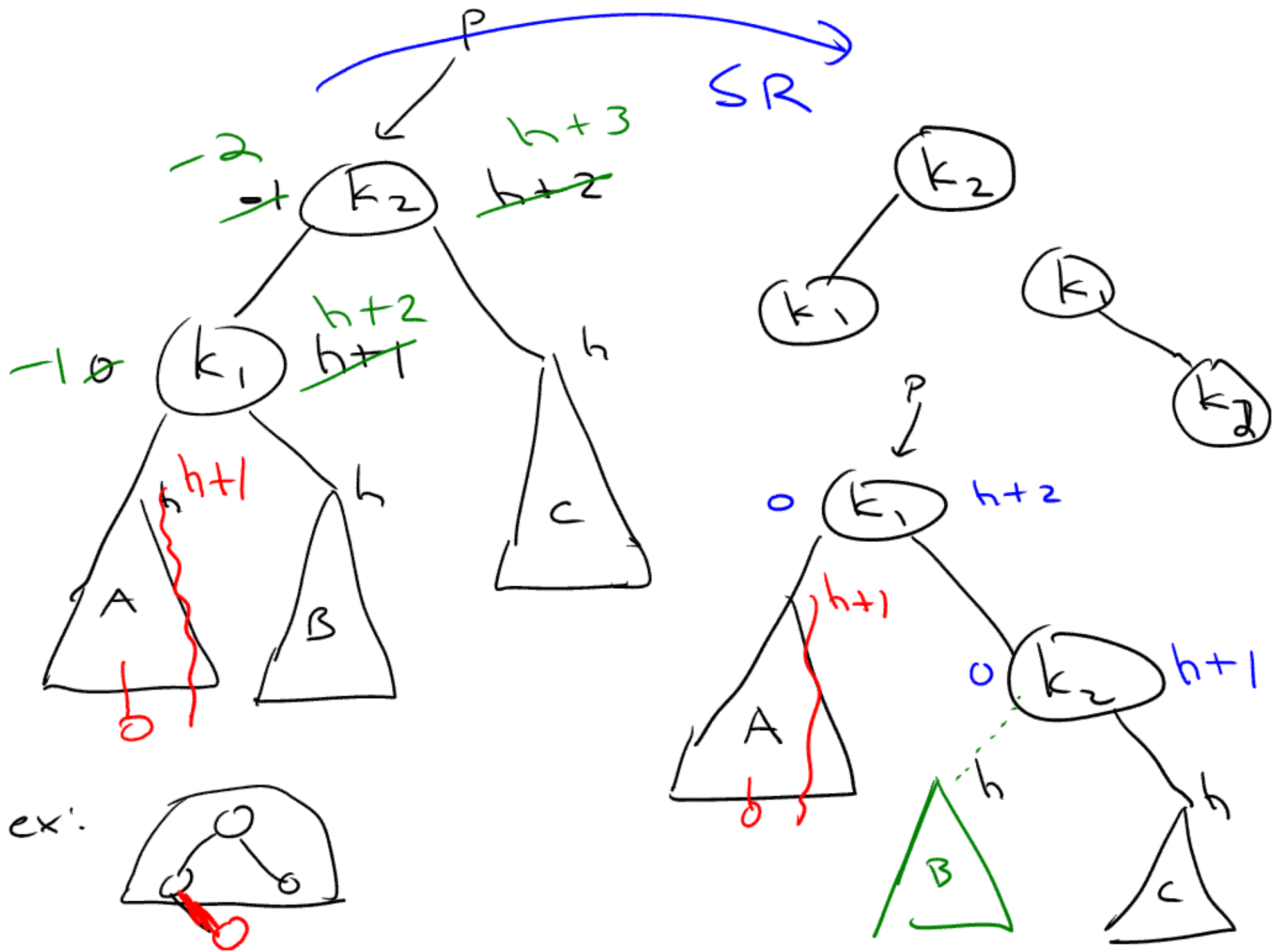
3) DR

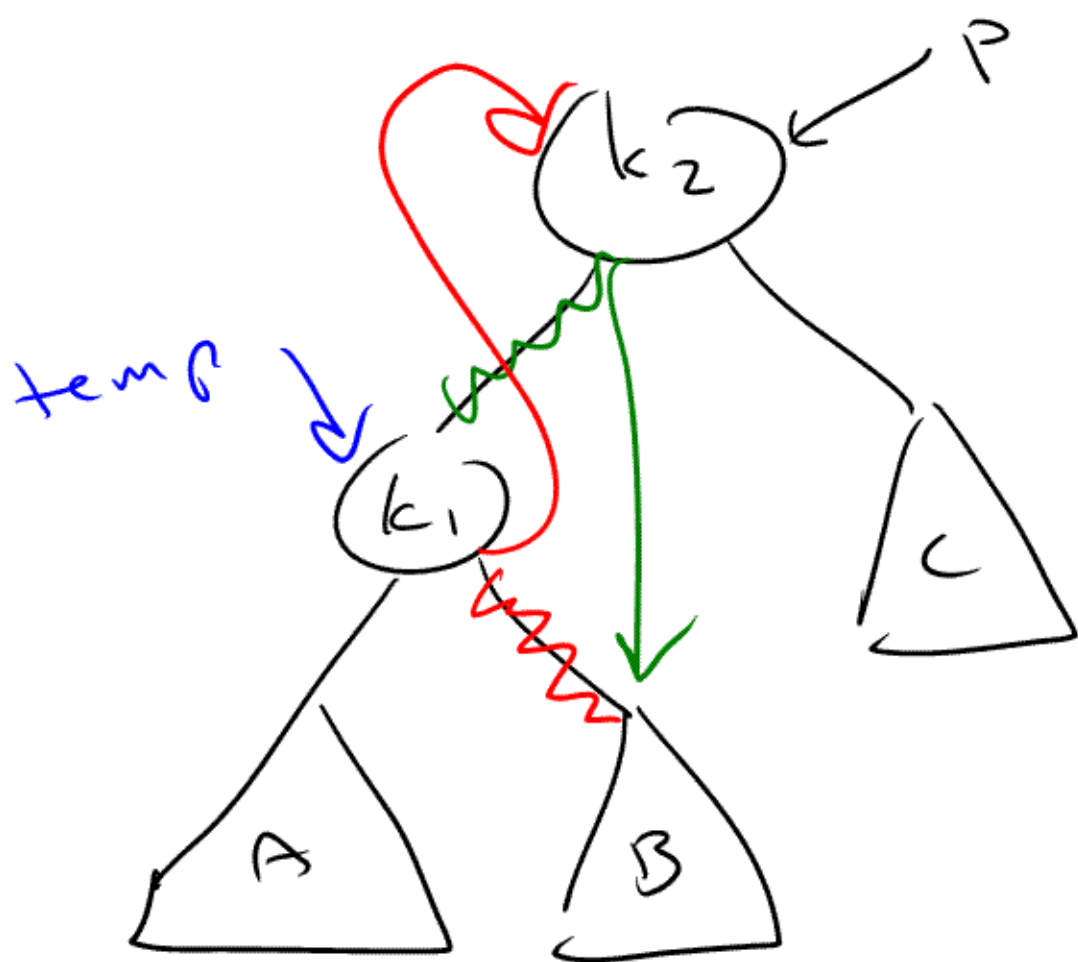
4) DL

) mirror

) mirror

→ 1) SL
2) SR



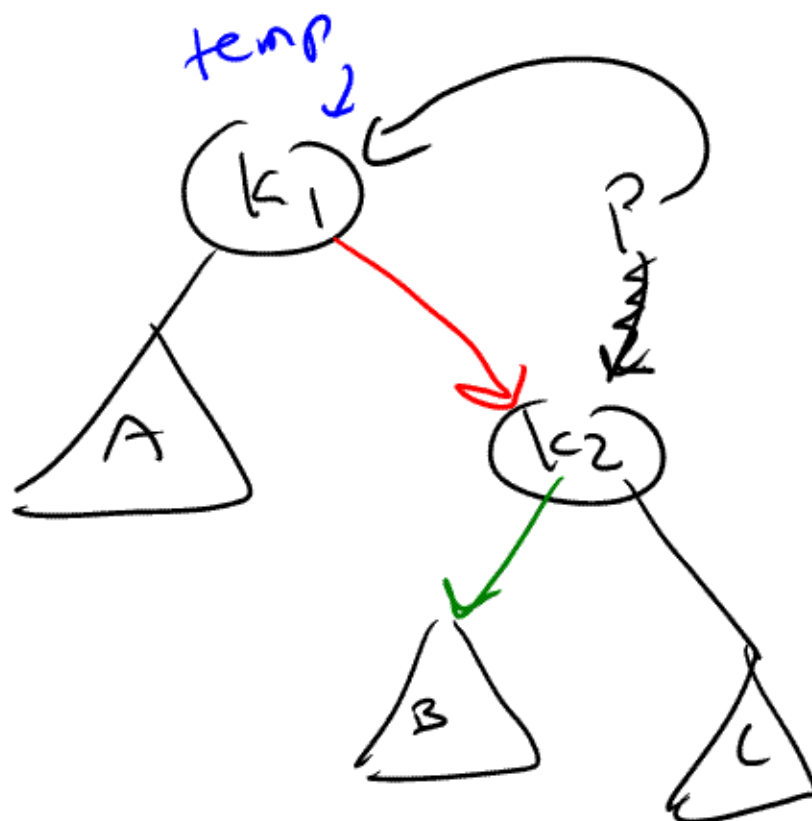


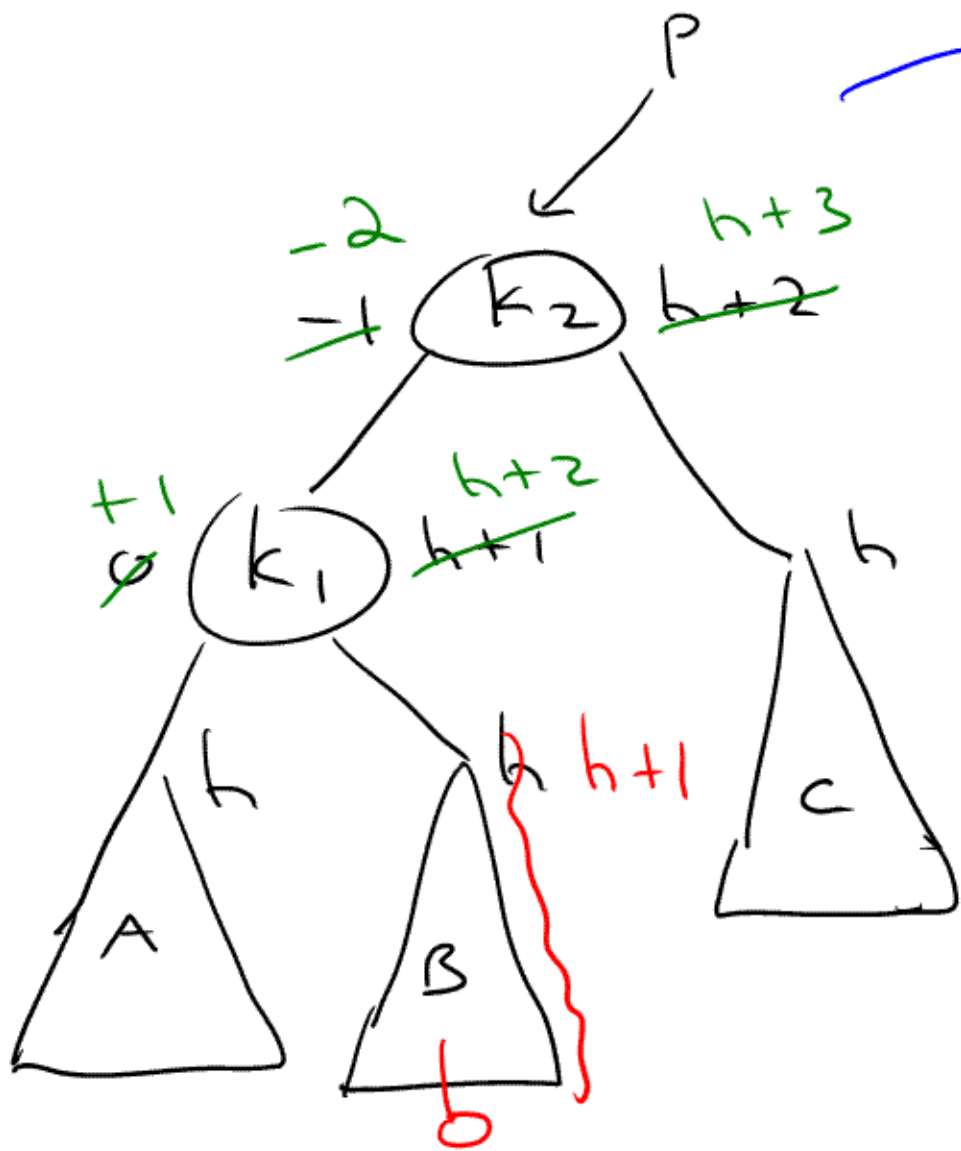
$temp = p \rightarrow left;$

$p \rightarrow left = temp \rightarrow right;$

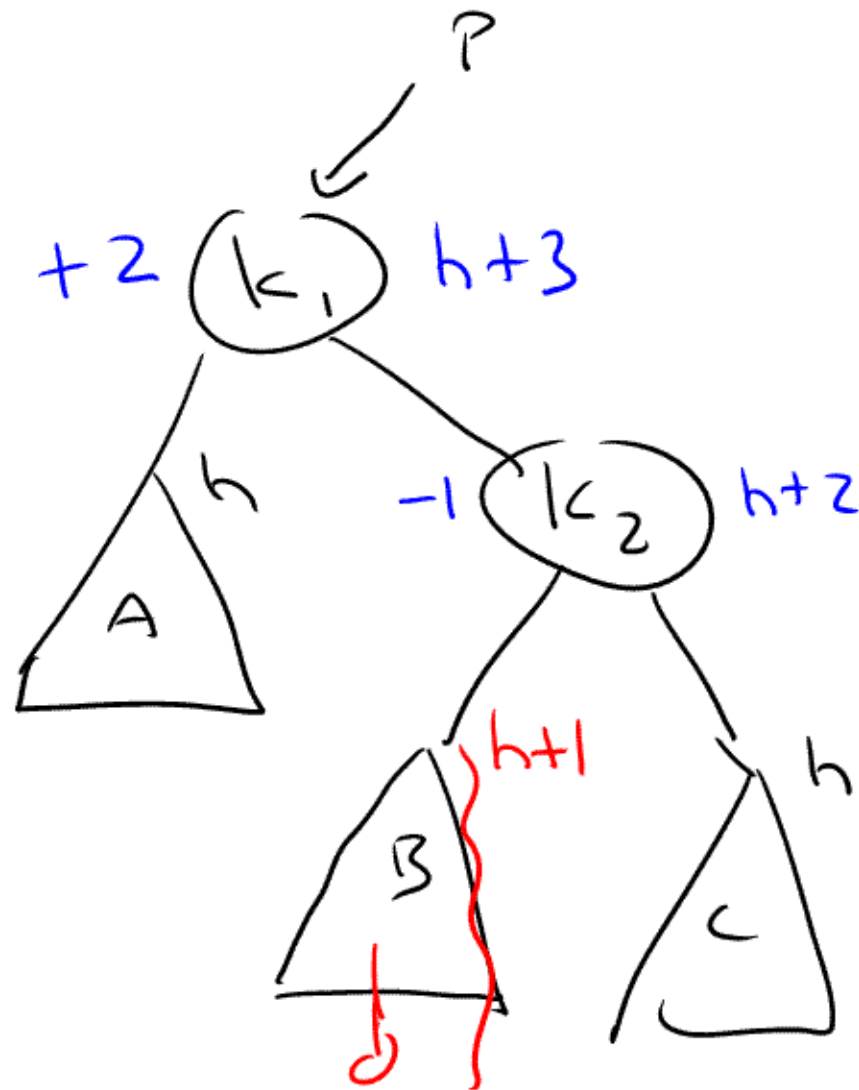
$temp \rightarrow right = p;$

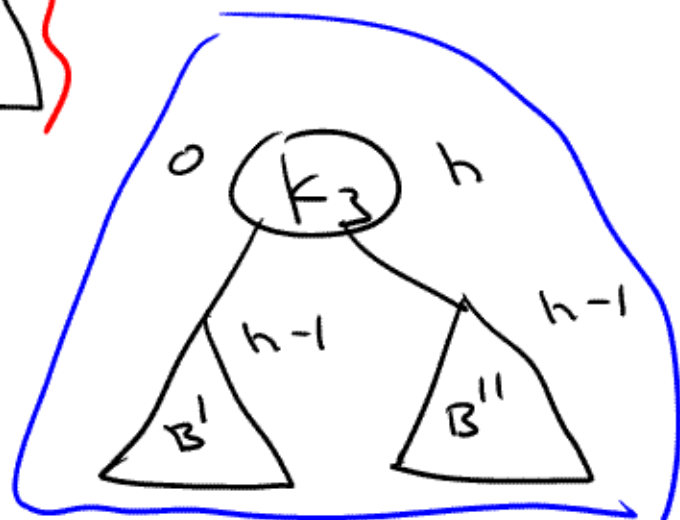
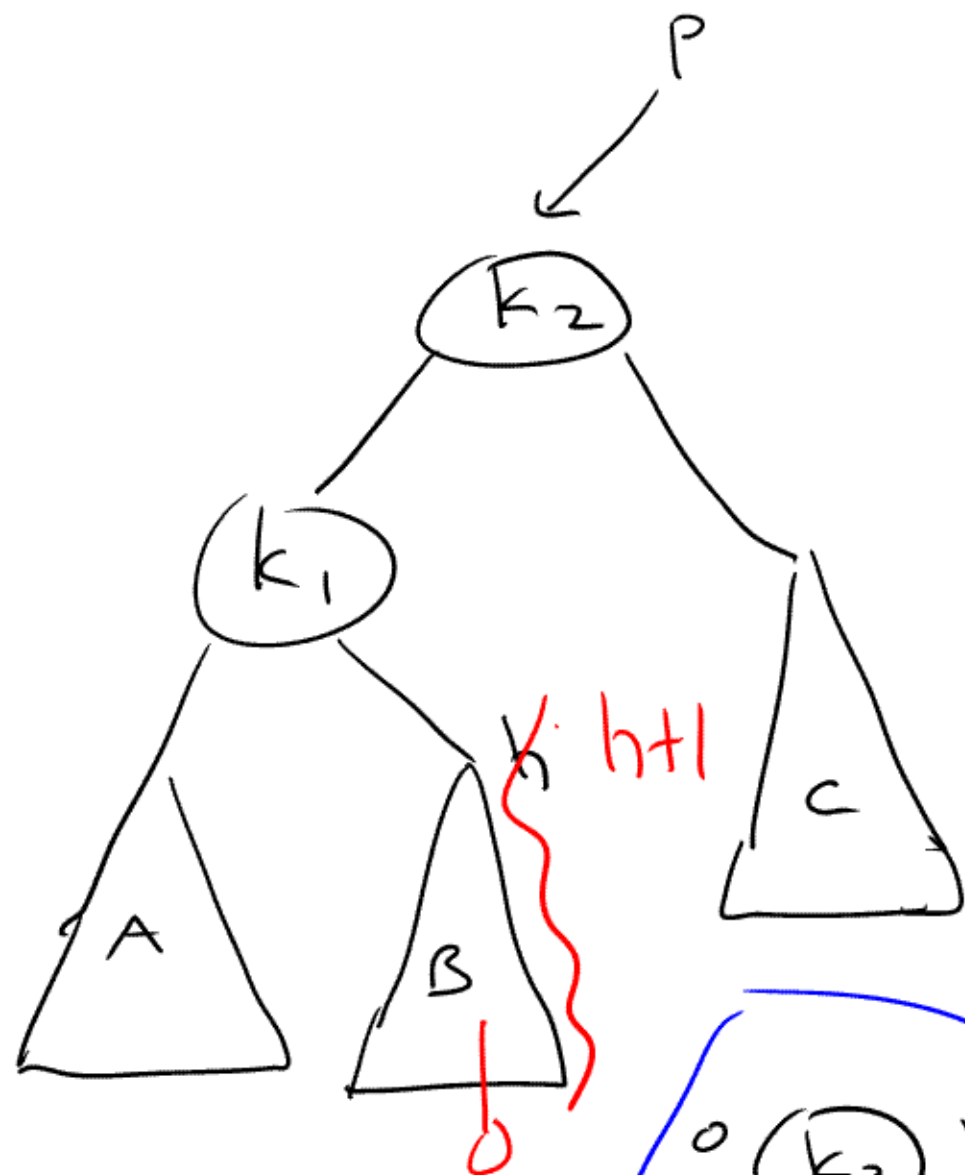
$p = temp;$

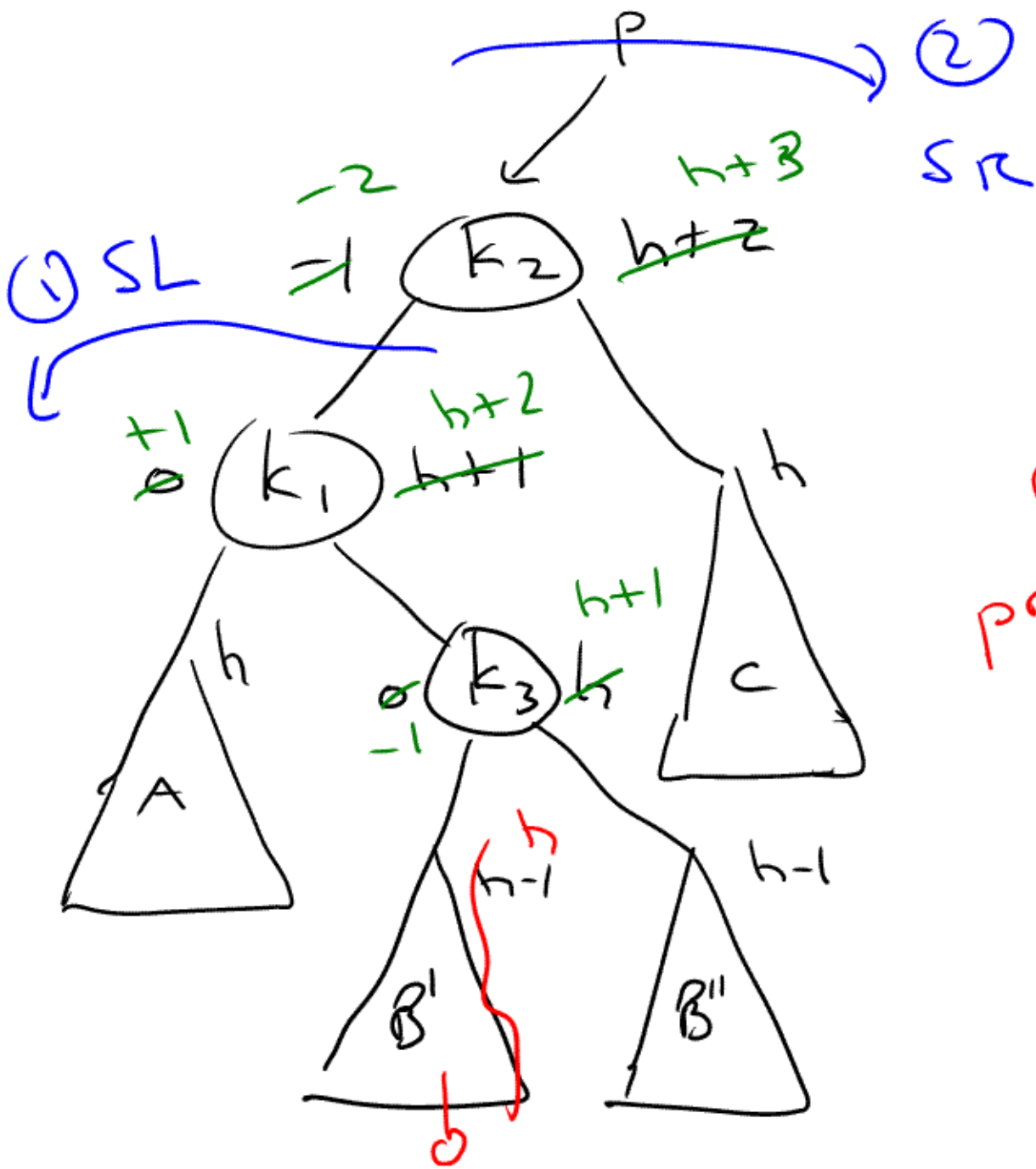




SR on k_2





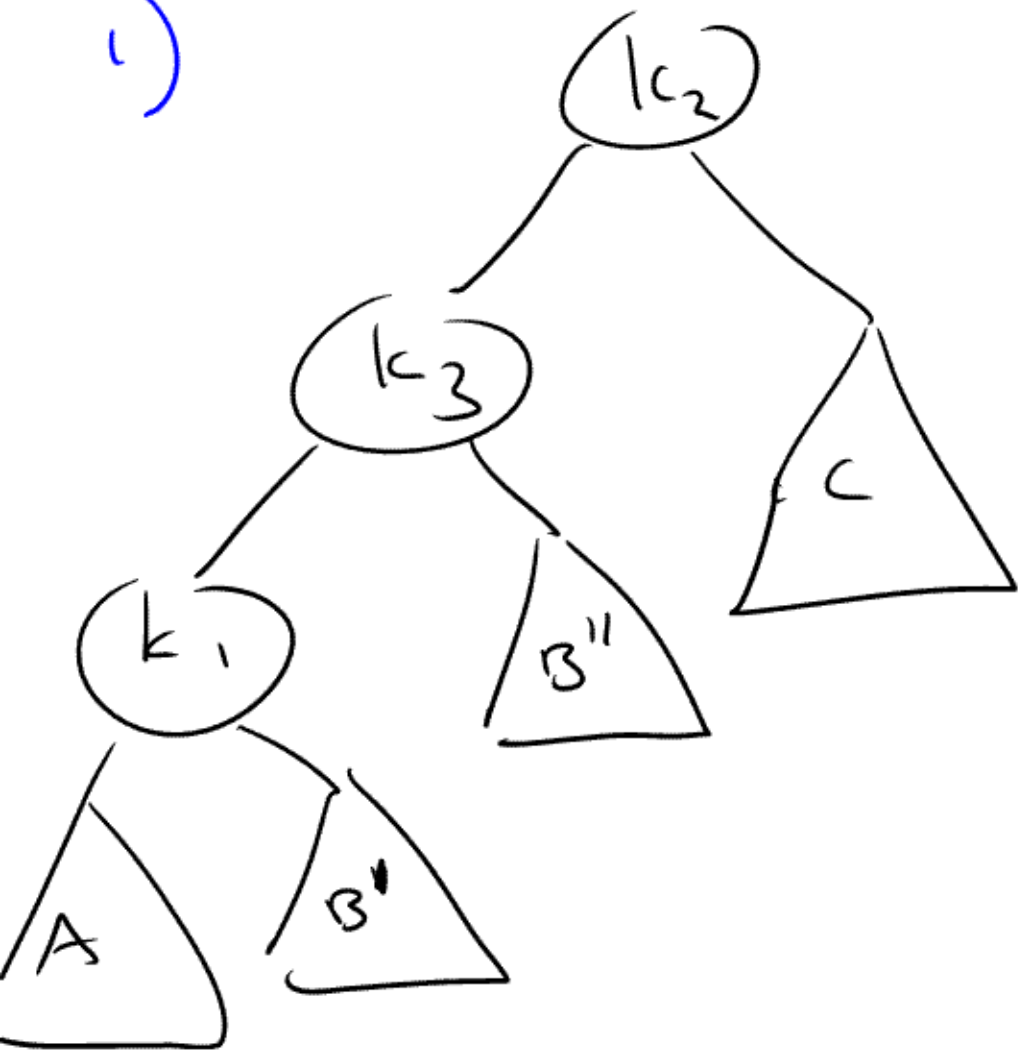


DR on K_2

(1) SL on left child of K_2

(2) SR on K_2

1)



2)

