

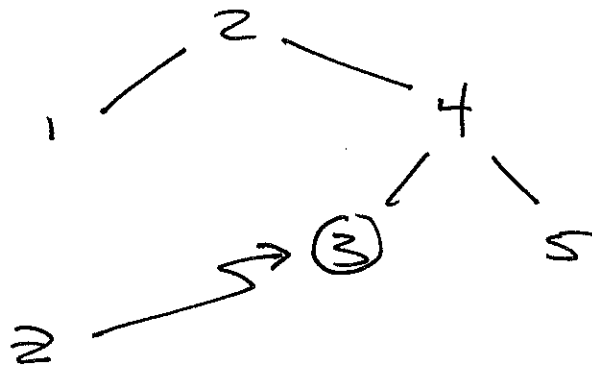
CS 2 101 2-29-24

Deletion in a BST!

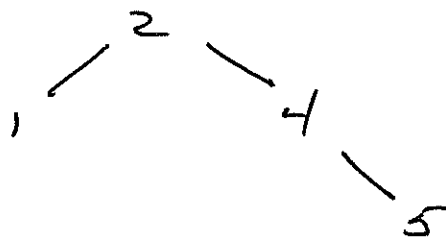
2 cases: z is node to be deleted.

Case 1: z is a leaf.

detach z from its parent



delete(3)

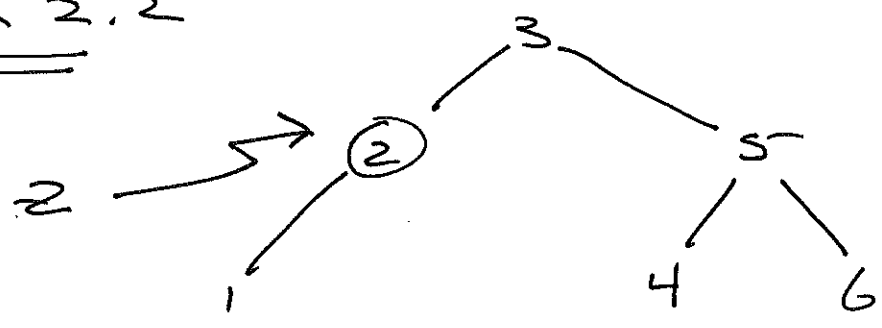


Case 2: z has 1 child

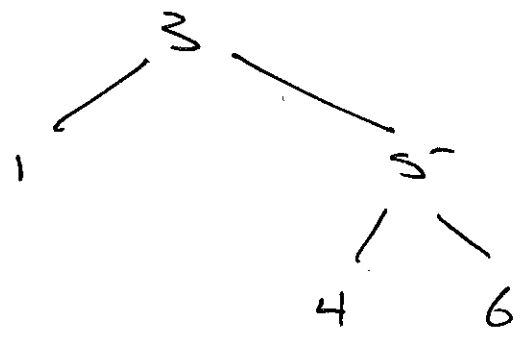
2.1: z has right but no left

2.2: z " left " " right

Case 2.2

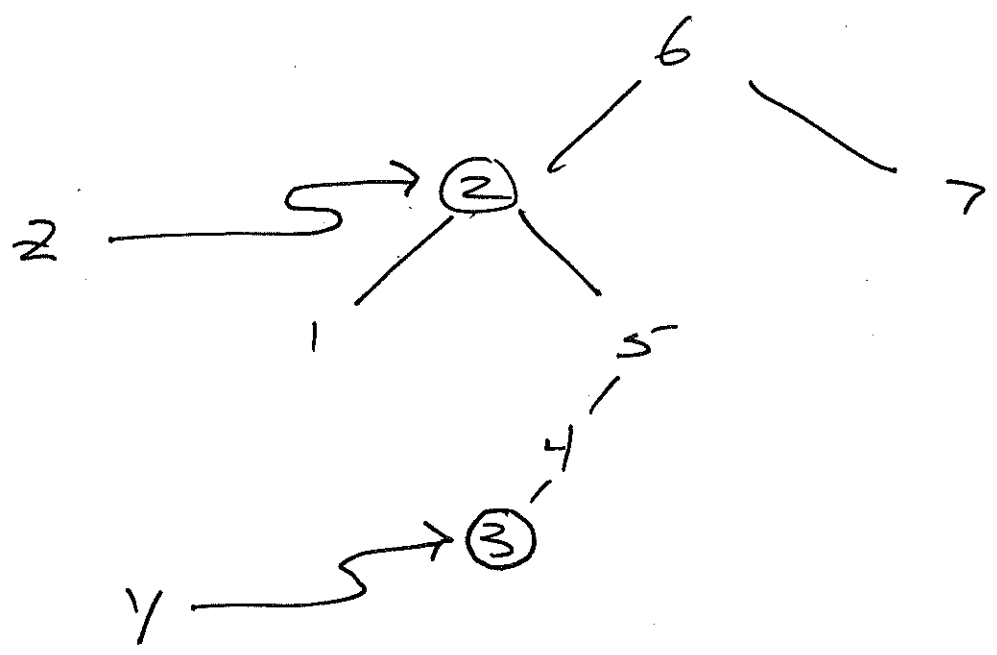


delete(z)

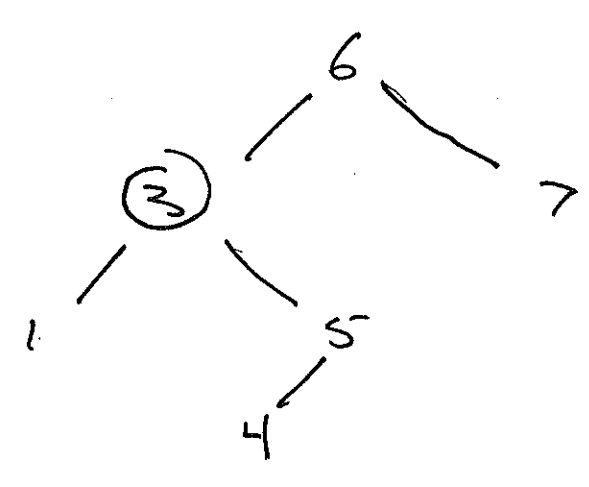


exercise: Make up an example of case 2.1

Case 3: z has 2 children
splice out z's successor,
call it y. Replace z with y.



delete(2)



4

Pa6: ext. 1 last day to Mon. 10PM

Pa7: now posted.