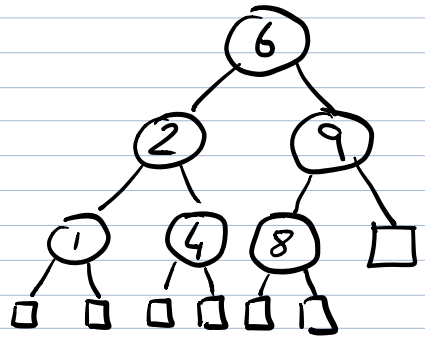
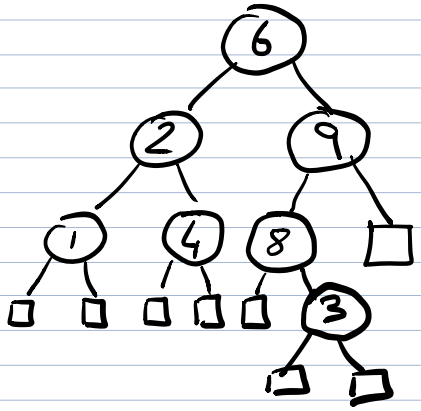


EXAMPLE OF ADDING AND REMOVING TO/FROM A PROPER BINARY TREE

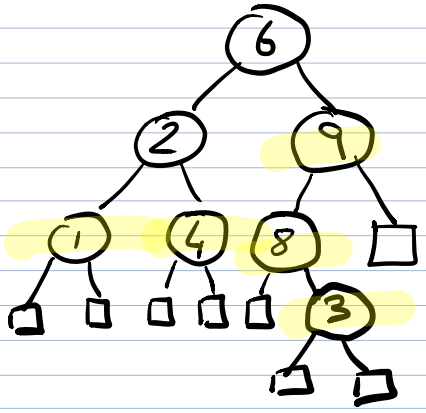
FROM LECTURE WEEK 2



Expand Right Child of 8 to add 3,

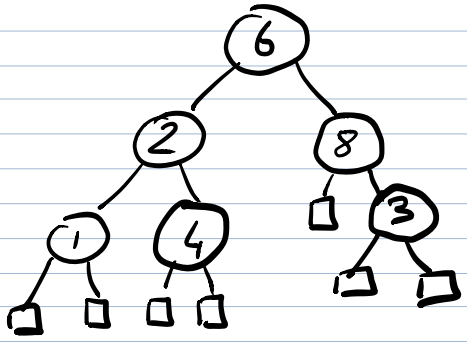
↳ Add 2 external children

↳ Store 3 in that node



REMOVE:
ONLY REMOVE NODES WITH AT LEAST 1 EXTERNAL CHILD

I CAN REMOVE

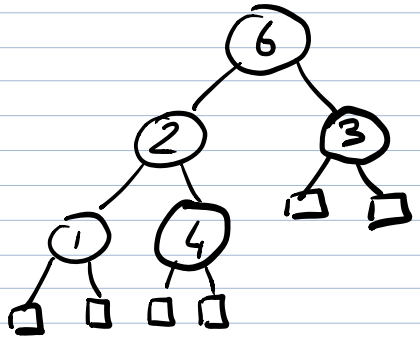


REMOVE 9

↳ RIGHT CHILD IS EXTERNAL ⇒ OK.

↳ REMOVE 9 AND ITS RIGHT CHILD

↳ REPLACE IT WITH ITS LEFT CHILD

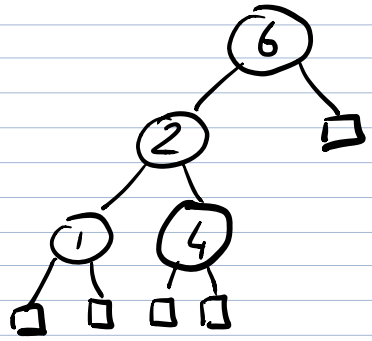


REMOVE 8

↳ LEFT CHILD EXTERNAL ⇒ OK

↳ REMOVE 8 AND ITS LEFT CHILD

↳ REPLACE WITH ITS RIGHT CHILD



REMOVE 3

↳ LEFT CHILD IS EXTERNAL ⇒ OK!

↳ REMOVE 3 AND ITS LEFT CHILD

↳ REPLACE WITH ITS RIGHT CHILD