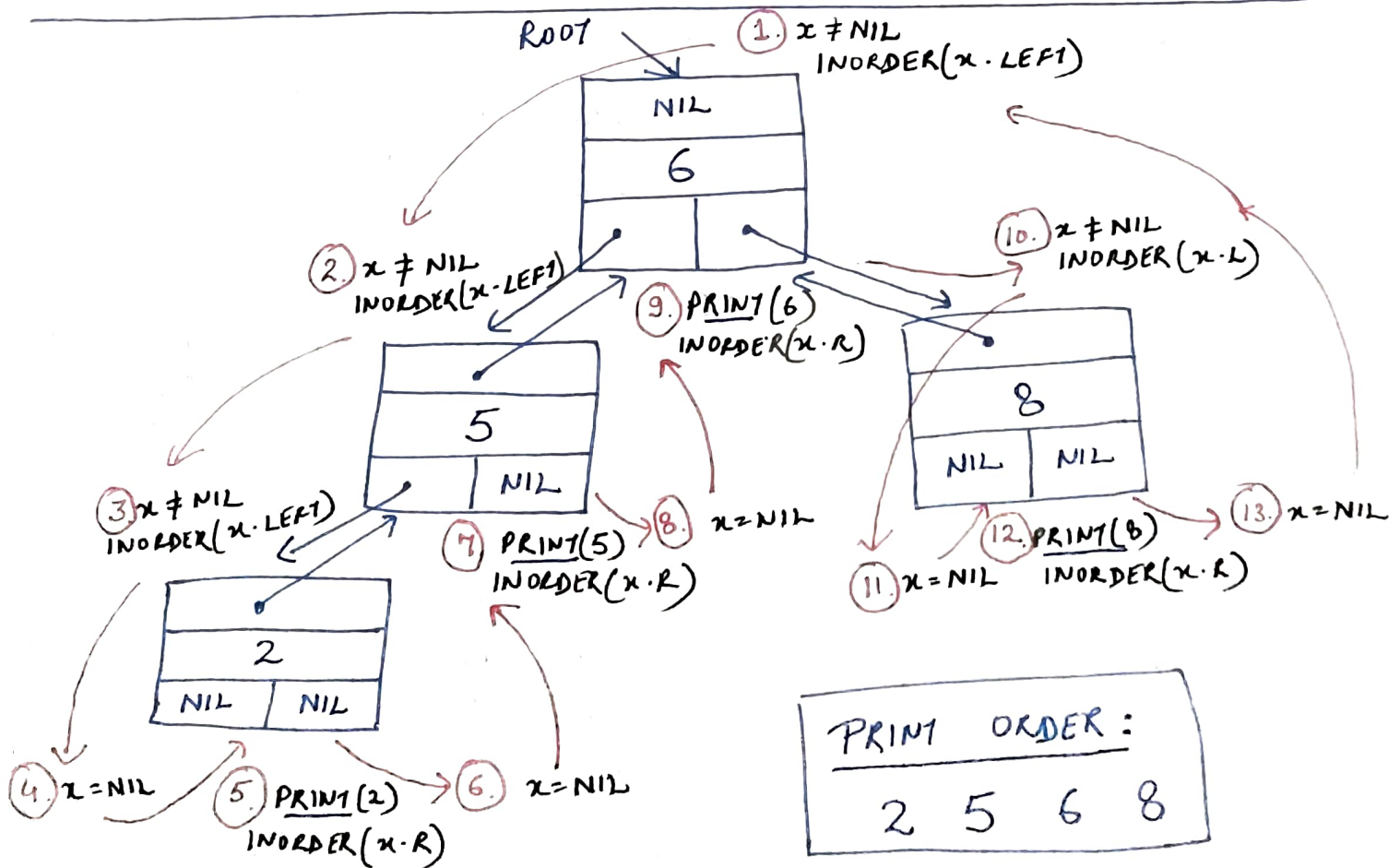
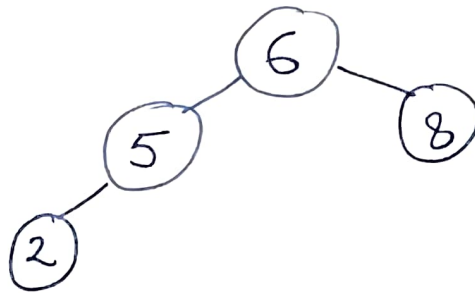


BINARY SEARCH TREE

* NODE REPRESENTATION :

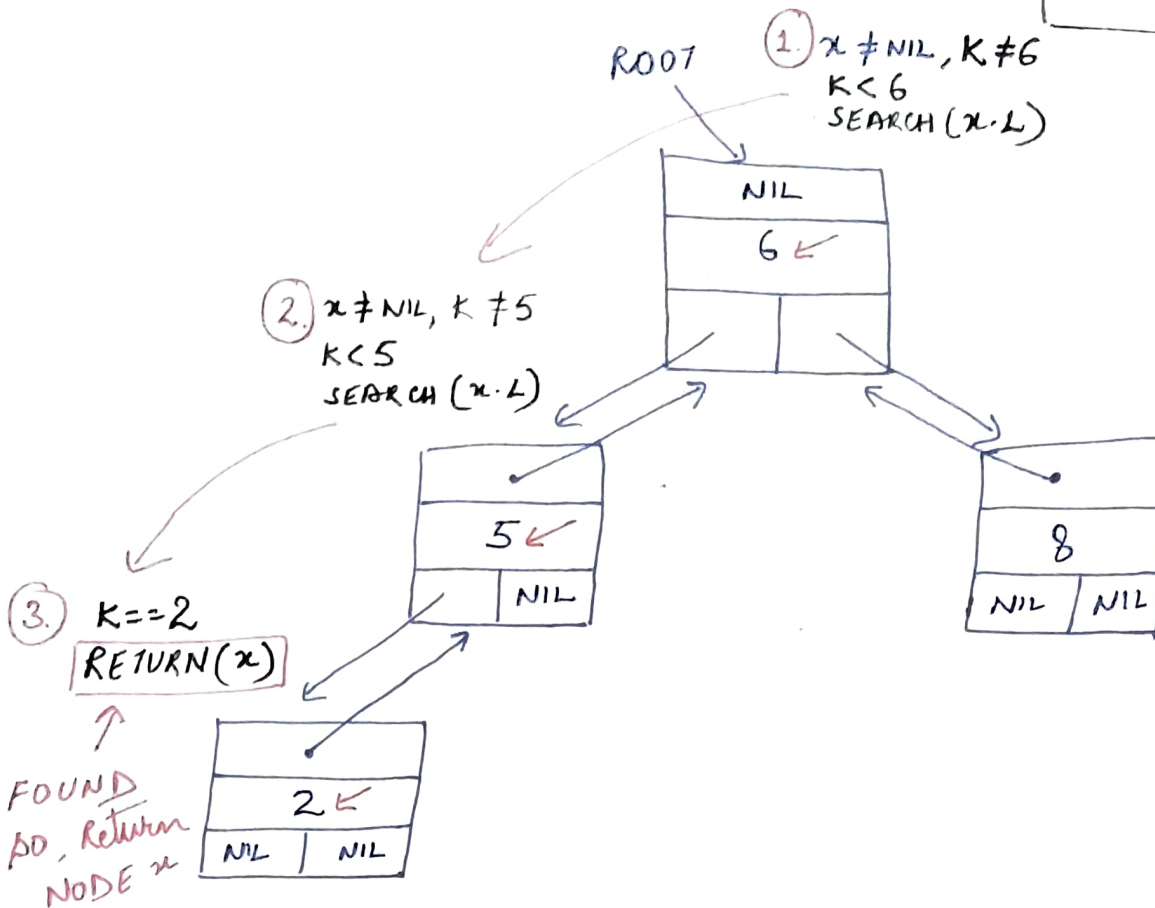
PARENT	
VALUE	
LEFT	RIGHT

* TRAVERSAL (INORDER) :



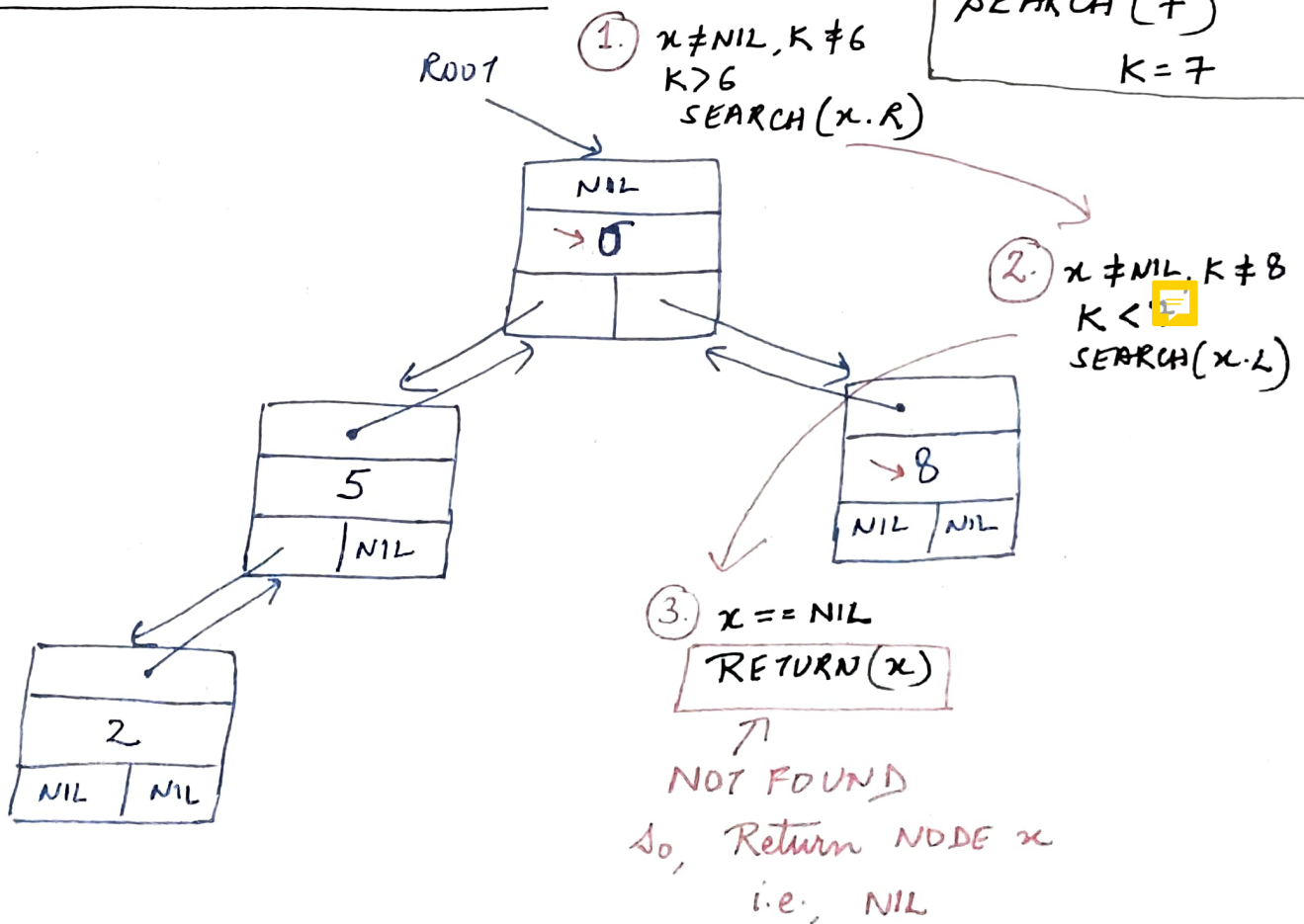
* SUCCESSFUL SEARCH

SEARCH(2) ^K ie.
K=2

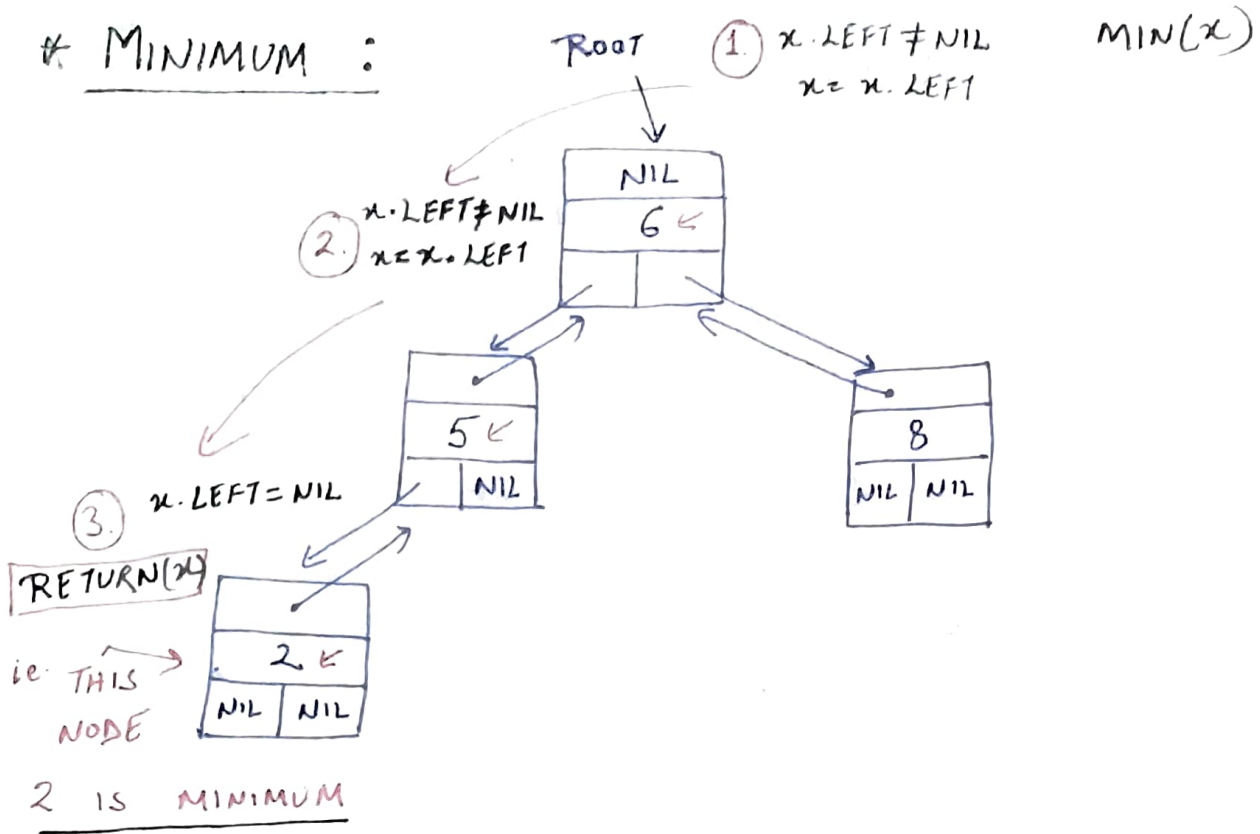


* UNSUCCESSFUL SEARCH

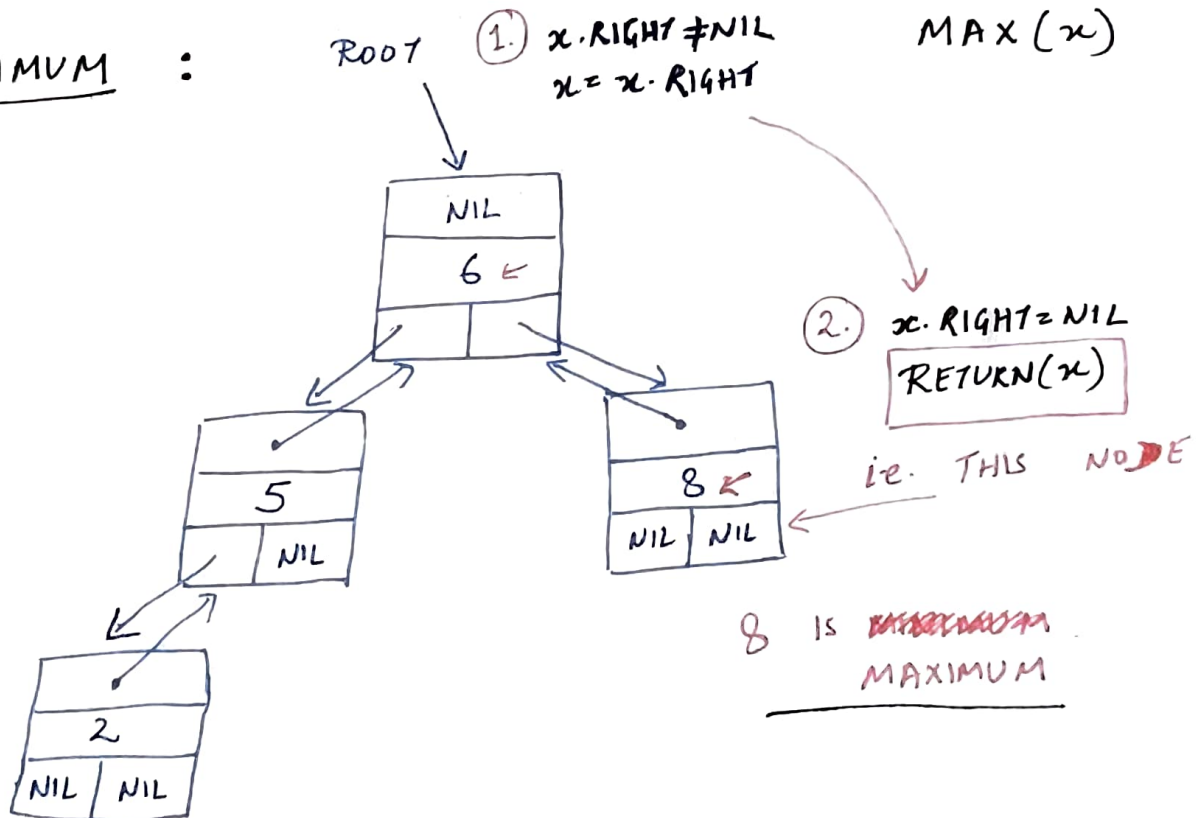
SEARCH(7)
K=7



* MINIMUM :

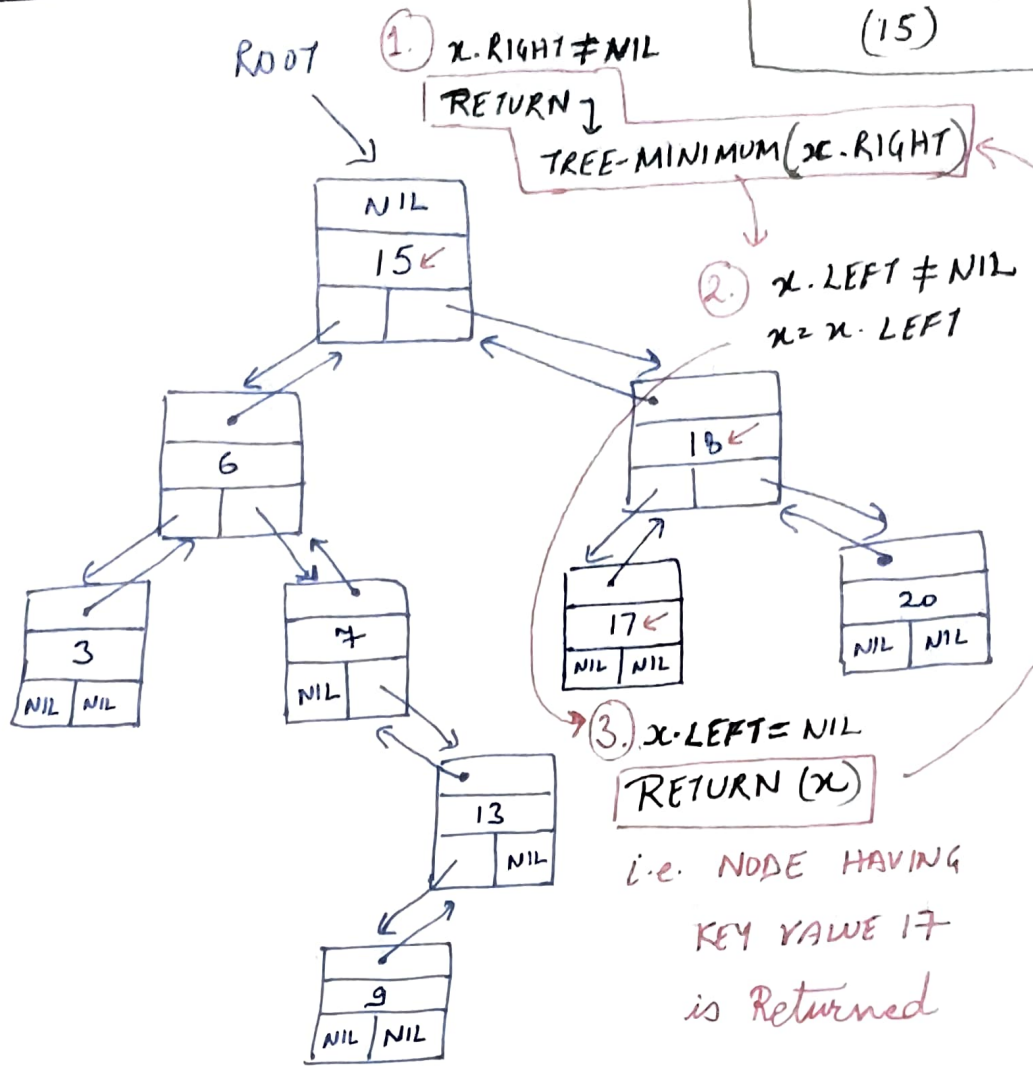


* MAXIMUM :



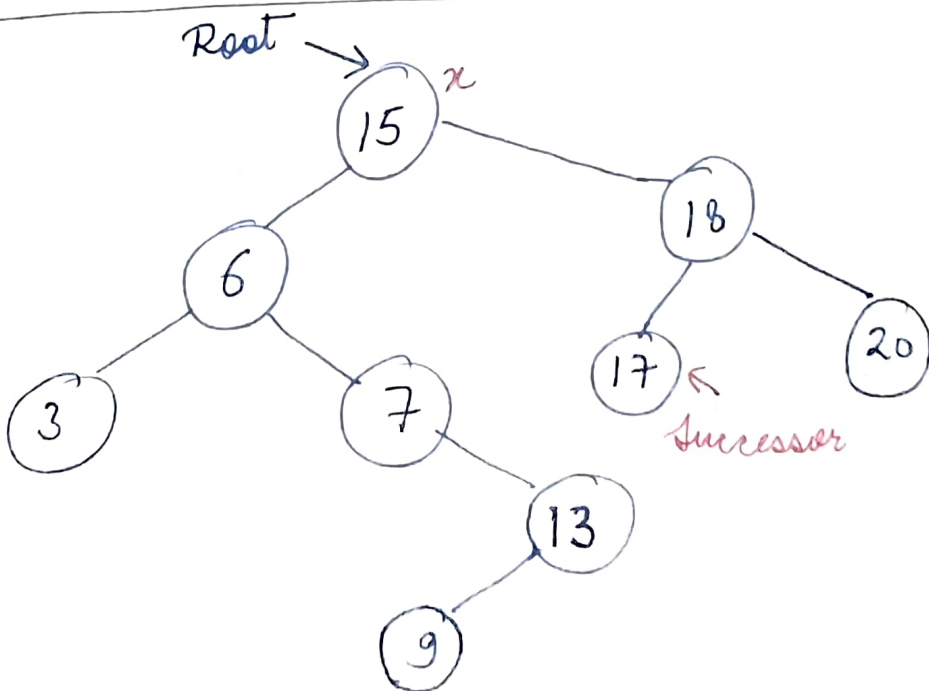
* TREE - SUCCESSOR (x):

CASE - 1:



So, Successor Node of 15 is 17.

CASE - 1:



* TREE - SUCCESSOR(x):

CASE (2):

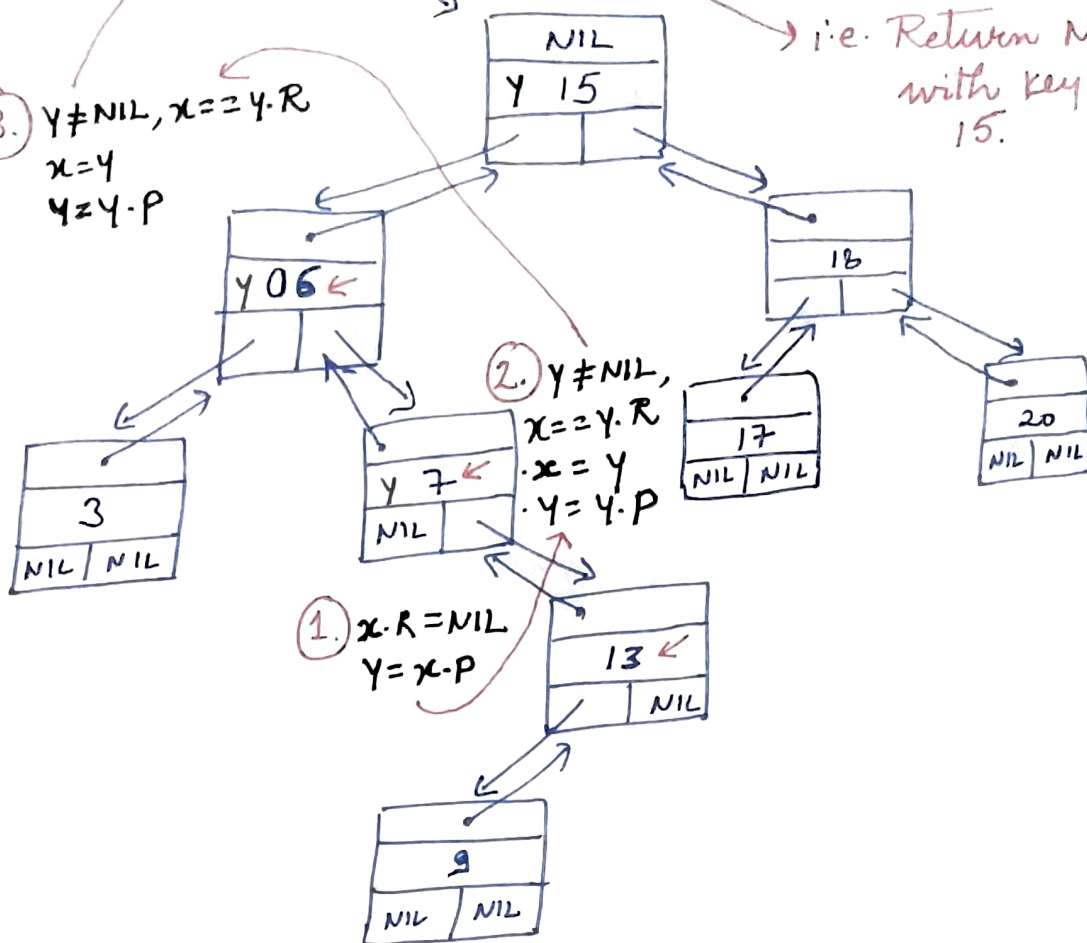
③. $y \neq \text{NIL}, x = z.y.R$
 $x = y$
 $y = y.P$

④. $y \neq \text{NIL}, x \neq y.R$
RETURN(y)

SUCCESSOR(13)

$x = \text{NODE with key value 13}$

i.e. Return Node with key value 15.



So, For 13, 15 is the successor node.

CASE-2:

