

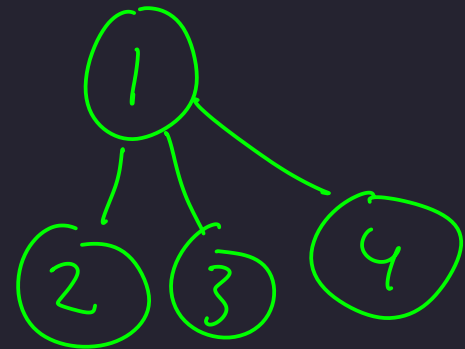
$tree(1) \rightarrow$

list $[child, \dots]$

"tree object"

$t = tree(1, [tree(2), tree(3), tree(4)])$

$[1, [2] \dots]$



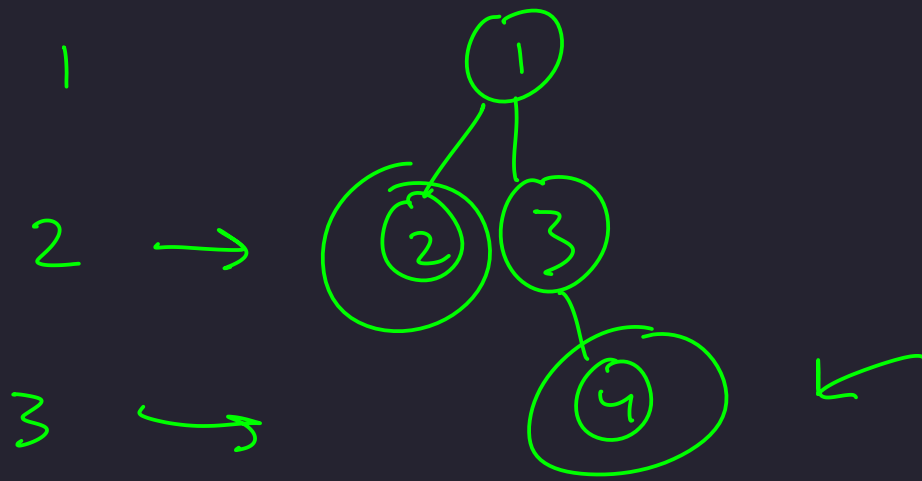
$is_tree(t) == True$

$is_tree(1) == False$

integer \neq tree

• Leaf: Node w/ no children

✓



print
tree

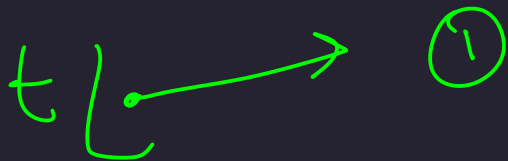
1

2

3

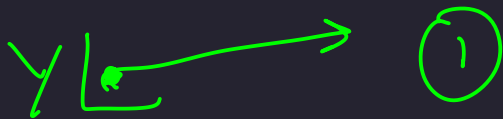
4

copy_tree(t)



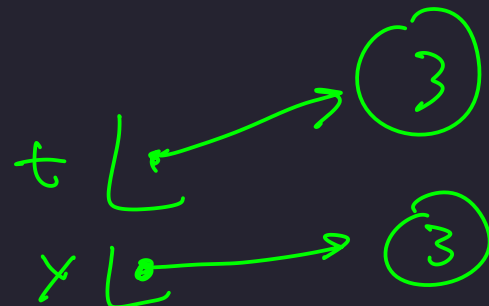
t = tree(1)

y = copy_tree(t)



t = tree(3)

y = copy_tree(t)



breaking abstracts

barrier

t = ①



t[0] = 2



t = ②