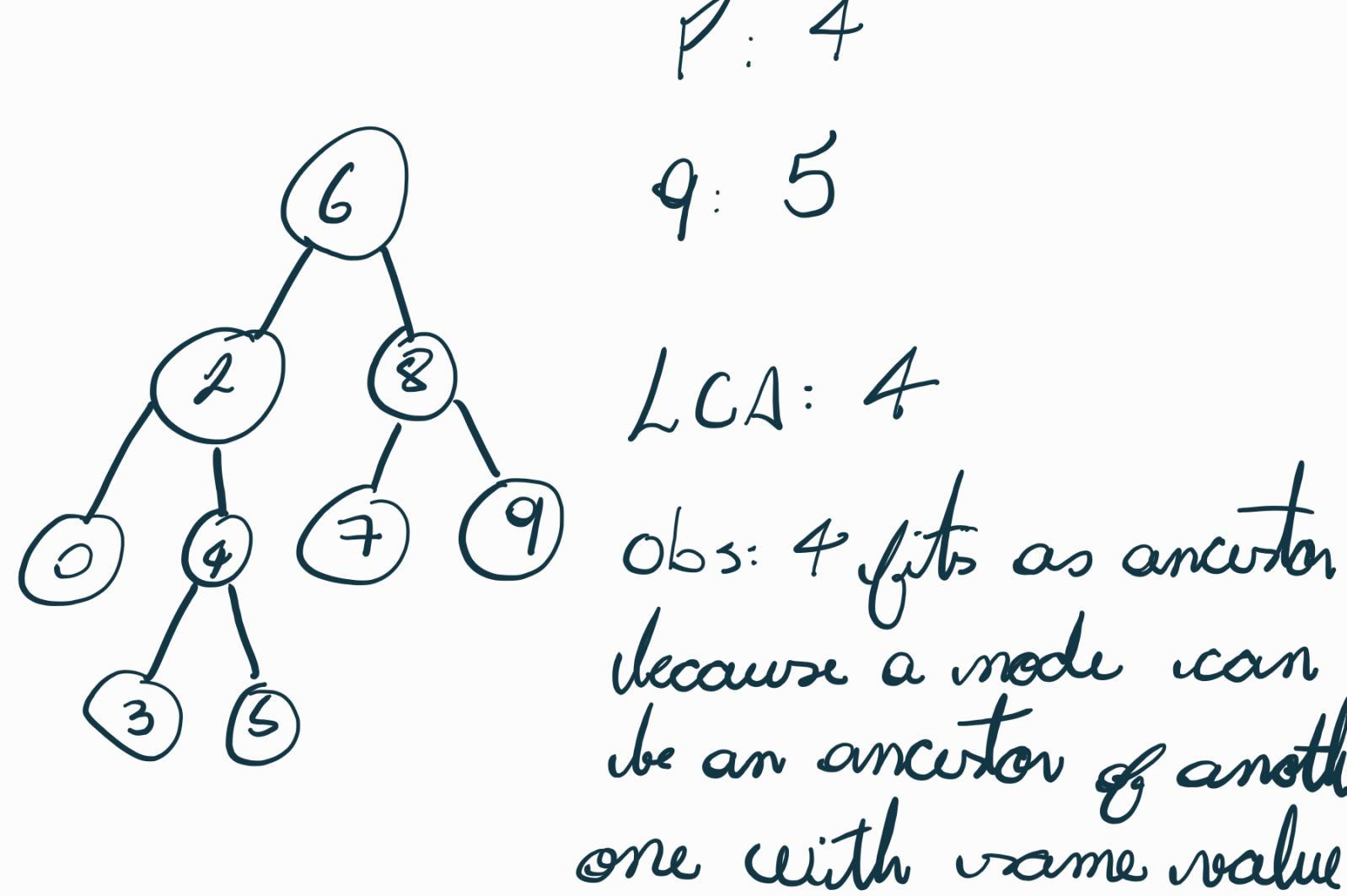
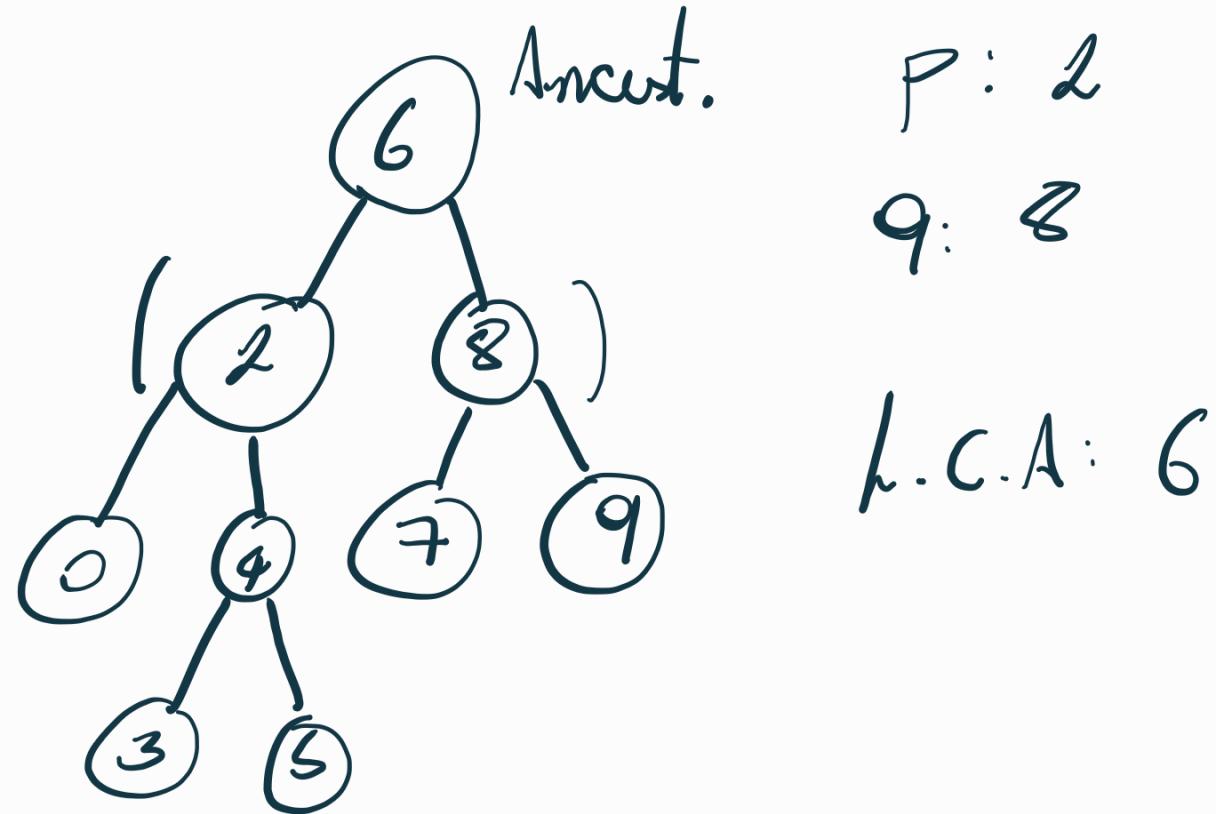


o) find the lowest common anc.  
between 2 nodes.

→ You are given an BT and  
2 nodes for comparison

↳ Ancestors are to be considered  
nodes with same value or  
parents.

→ given BT layers, lowest are  
the deepest nodes that fits  
into ancestor's description



→ the point here is, you need to find the first intersection between P and q

→ while you traverse the tree, the first time P and q are on different sides configures the lowest common ancestor

→ if problem says nodes are unique, you will have to rely on BST props to traverse.

Now to check descendants

→ Need to rely on BST props to offer descendants.

↓ ↓ ↓

Explanation: given an root, children at its left are lower (Value) than it and children at its right are higher

→ We know that if both value are higher than current root the common descendant is at right

obs: to check if both 2 values are higher than a source, get Min of both and compare if its higher than source  $\text{Min}(3,2) > 3$

L, because if the min value between those is actually higher than source, then the other one is equal or higher, so both will be higher than source.

C, if both values are lower than C. root, common descz. is at the left.

obs: Equally to the upper decift. to check if both values q and P are lower than source

→ get max of q and P and check if it is lower than source, because if max value betw. then is lower than source then both are

→ Any other case aside those means that the values are equal to source (Current root) or they are in different sides of the root.

→ which means you found the common descendant.