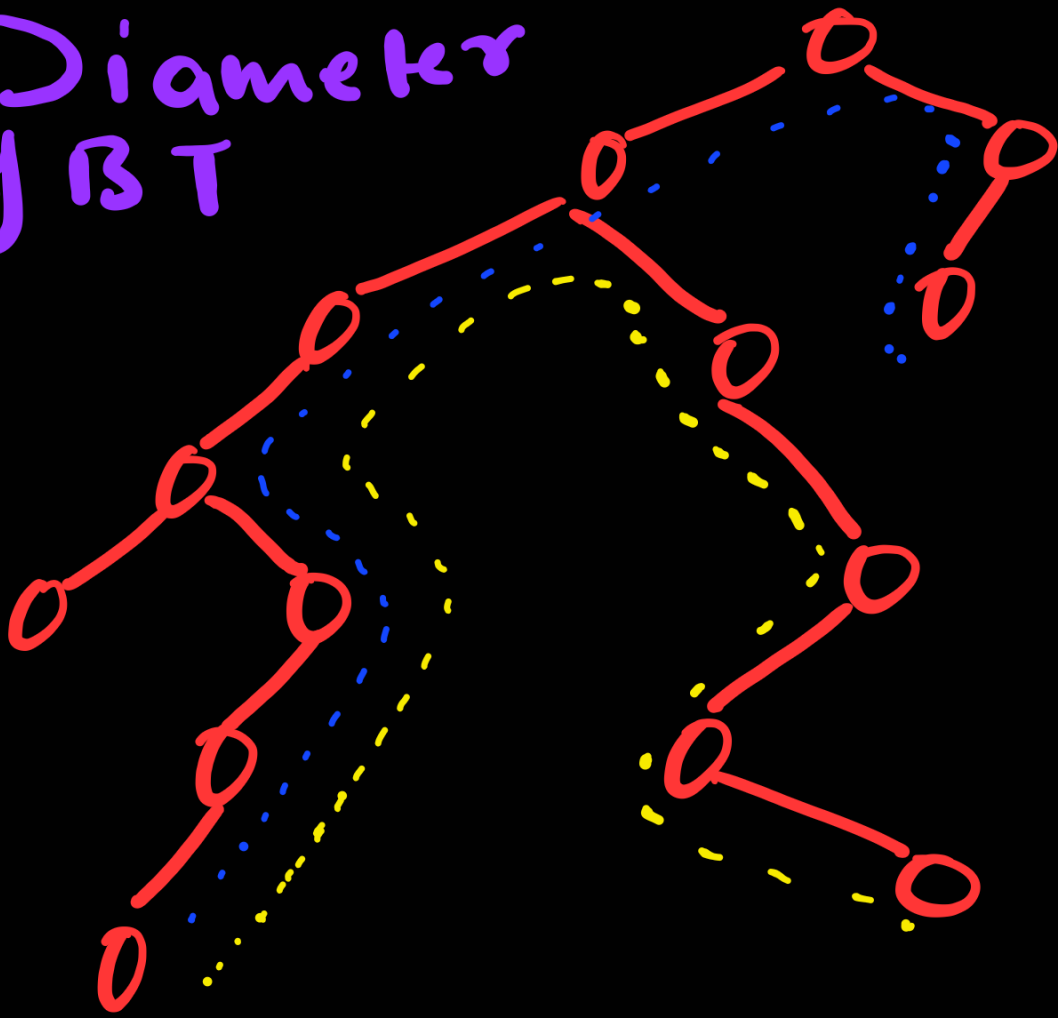


Diameter
of BT



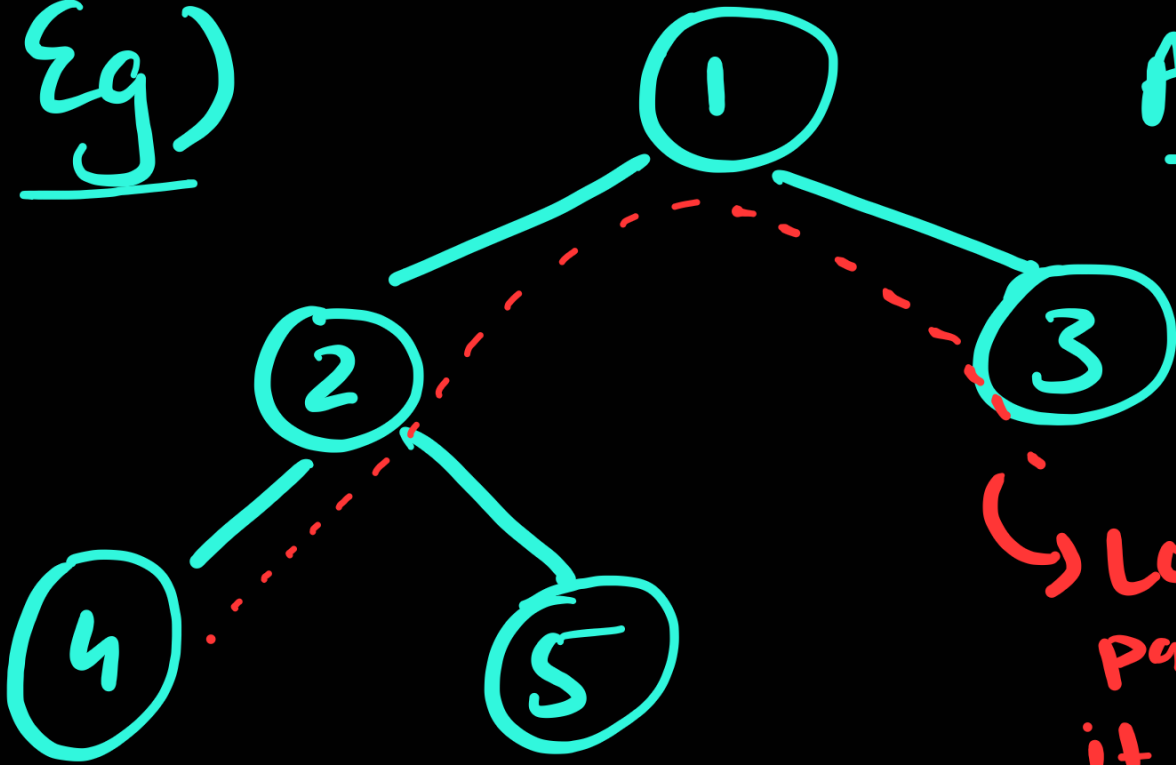
blue path $\Rightarrow 8$

yellow path $\Rightarrow 9$ ✓ diameter.

So here the diameter of the binary tree does not pass through the root node.

lets see how height
and binary tree related.
diameter

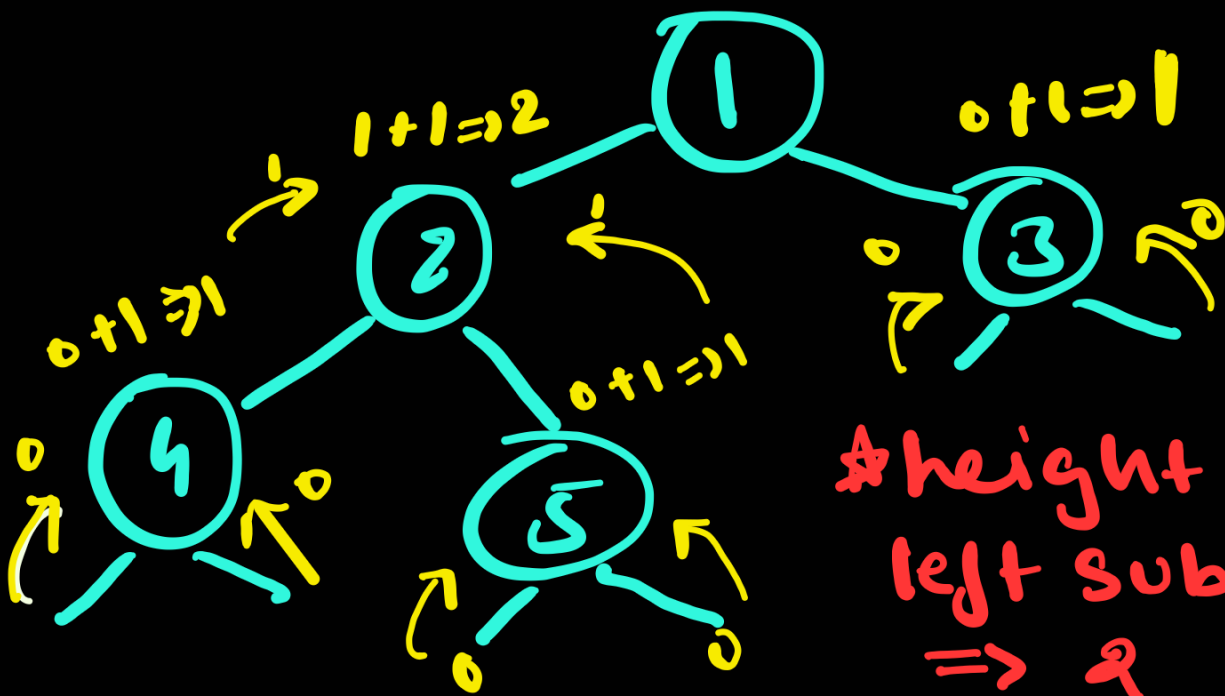
Eg)



Ans

3

Longest path, so it will be diameter.



*height of left sub tree $\Rightarrow 2$

★ height of right subtree
is $\Rightarrow 1$.

So the diameter will be
the sum of height of
left subtree and height of
right subtree.

diameter \Rightarrow left subtree
height
+
right subtree
height

★
