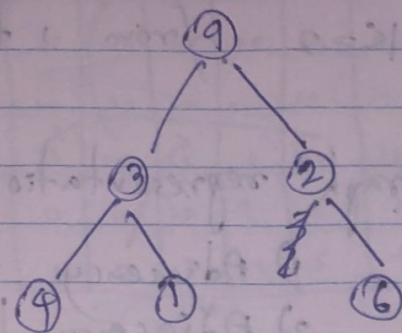
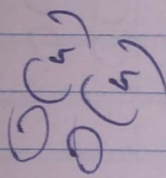


## \* Verify Preorder Serialisation of a Binary Tree



$\Rightarrow 9, 3, 4, \#, \#, 1, \#, \#, 2, \#, 6, \#, \#$

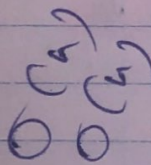
~~can't~~ without generating tree



adding each node adds 2 vacancies (not #)  
traversing through each reduces a vacancy.

\* if vacancies  $< 0$  then it's invalid.

finally vacancies should be 0.



Store in a stack. when # comes,  
check  $\text{top} = \#$ , then pop twice & push #.

finally  $\text{stack.size} = 1$  &  $\text{stack.peek} = \#$ .