

Q3.3.

Because the longest path from the node q to p , the diameter of binary tree is the length of longest path between any two nodes in a tree.

This path may or may not pass through the root. And the length of a path between two nodes is represented by the number of edges between them. Thus, we have $\text{dist}(q, p) = 7$ and which is the max value of distance we find in the graph.

So, the diameter of above tree is 7.