

1. What exactly is an application tree?

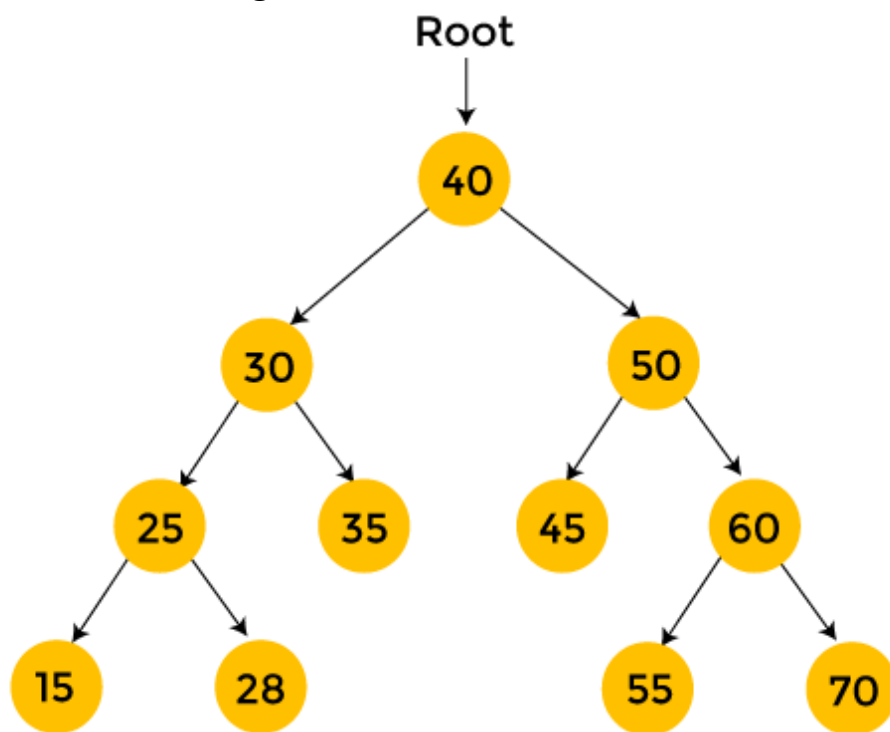
Application tree is a tree view display of the folders, files that app scan on your applications. All applications are connected in the form of tree is called application tree

2. What is pre-order tree traversal and how does it work?

Tree is a non-linear data structure which has only one way to traverse the whole data structure unlike linear data structure like stack, queue etc. Pre-order tree traversal is one way of traversing the tree which follow **Root left right** sequence.

Example:

- First visit the root node
- Then, visit the left node
- Then, visit the right node



After pro-order traversal the order of visiting the nodes looks like

40, 30, 25, 15, 28, 35, 50, 45, 60, 55, 70

3. What is the problem with the Hanoi tower?

- ✓ Only one disk can be moved at a time
- ✓ No disk can be placed on top of the smaller disk
- ✓ Non-sight problem

4. Explain the distinction between linear and non-linear data structure?

Linear data structure: Linear data structures are stack, queue etc, which has only one way to traverse the entire data structures and these are easy to implement because computer memory is arranged in a linear way unlike non-linear data structure

Non-linear data structure: Non-linear data structures are Trees, Graphs. We can traverse through the entire data structures in different ways and multiples levels are involved and this implementation is complex

5. What is a distinction between list and an array?

List	Array
<ul style="list-style-type: none">• Support different data types• Not require any loop to print the elements in an array• Comparatively slower than array	<ul style="list-style-type: none">• Supports same data type• Require a loop to print an element in an array• Comparatively faster than list

- Used to store small amount of data

- Used to store large amount of data