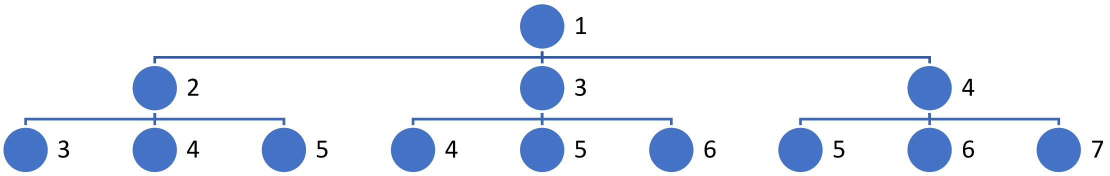
Leftmost-Child Right-Sibling Tree Implementation

Traversal Algorithm	Height of tree	Time in Seconds (Running locally)
Pre-order	3	4.05311584473e-06
	4	4.05311584473e-06
Post-order	3	5.00679016113e-06
	4	5.00679016113e-06

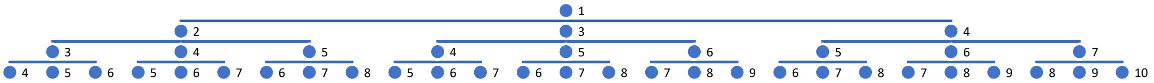
Conclusion: A height of 1 makes minimal effect on the timing of the Traversal when working with such low numbered heights. My guess would be that the difference between larger heights such as 300 and 301 would be much more substantial than heights 3 and 4.

Below are representations of the trees used in this timing. The numbers represent the node’s value or “label”.

Height 3:



Height 4:



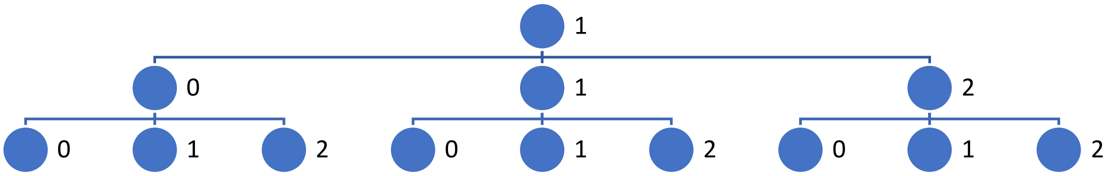
List of Children Tree Implementation

Traversal Algorithm	Height of Tree	Time in Seconds (Running Locally)
Pre-order	3	1.09672546387e-05
	4	2.38418579102e-05
Post-order	3	1.19209289551e-05
	4	2.90870666504e-05

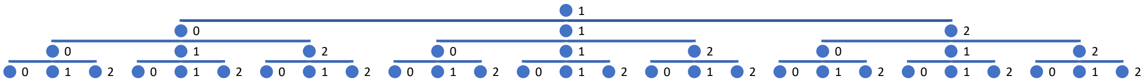
Conclusion: Here we see that increasing the tree height actually almost doubled the timing, however with how small the timing actually is, this doubling is virtually unnoticeable. Throughout multiple trials there were runs where the numbers varied quite a bit, however a majority of them ended up looking similar to the numbers presented above.

The trees looked the same as the LCRS Tree with the exception of their value/label being different.

Height 3:



Height 4: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