Prob. 1	Prob. 2	Prob. 3	Prob. 4

Problem 1.

We can use contradiction or construction:

max: sth like suppose there is another binary tree with greater potential than the binary list but with the same n number of nodes that would mean that at some height of the tree there is one node having more nodes in its sublist than the equivalent node in the linked list however this would be impossible since in a linked list the only nodes of a tree that are not included in a node's subtree are its parent nodes

well we can just say that the w(root) = n-1, and the biggest weight for its child is n-2 constructing such a tree will end up with a linked list

min: well summing n/2 + n/2 or (n/2)-1 + (n/2)+1, doesnt matter, we get n BUT by doing n/2 + n/2 we will have the tree with the smallest height -¿ smallest number of element in the sum

and besides this way we maximize the number of nodes with no children

Problem 2.

Problem 3.

Problem 4.