Day 11 Recall quiz

1. The number of external nodes in a full binary tree with n internal nodes is?
   1. 2n + 1
   2. 2n
   3. n+1
   4. n
2. A binary tree constructed with n nodes, each node has either 0 or 2 children. The maximum height of the tree is?
   1. (n+1)/2 -1
   2. n/2 -1
   3. (n-1)/2
   4. (n+1)/2
3. In a full binary search tree every internal node has 2 children, how many internal nodes are there for 100 leaf nodes?
   1. 99
   2. 100
   3. 101
   4. 25
4. If n elements are sorted in a binary search tree. What would be the asymptotic complexity to search a key in the tree?
   1. O(1)
   2. O(logn)
   3. O(nlogn)
   4. O(n)
5. Primary need of a binary tree being height balanced ?
   1. simplify code
   2. save memory
   3. avoid formation of skew trees
   4. save time (speed)