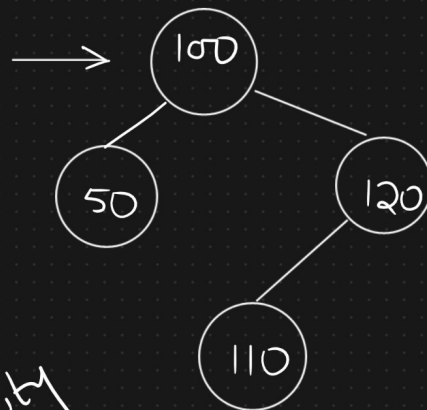


Insert in BST

100, 50, 120, 110

h
↑



① locate the exact position

② Insert that element in the allocated position

Time complexity

Balanced BST

Binary Search

$$T(n) = T\left(\frac{n}{2}\right) + c$$

$$= \underline{\underline{O(\log_2 n)}}$$

h

Imbalanced BST

$$T(n) = T(n-1) + c$$

$$= O(n)$$

Space complexity

└→ Recursion



Stack space



$O(n)$