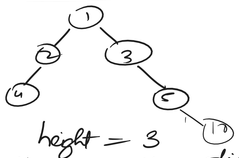
* Given a Singly Linked List, write a function to determine whether the given list is a palindrome or not.

I/P → 1 → 2 → 3 → 2 → 1 → null
↳ O/P true

I/P → 1 → 2 → 3 → null
↳ O/P false

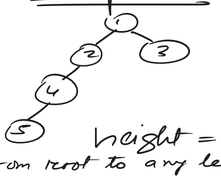
Given a Binary Tree :→ ~~★★★★~~
Find the height of the Binary Tree:

Example 1



height = 3

Example 2



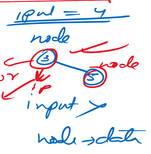
height = 4

Height = Max distance from root to any leaf.

Two important interview Questions on BST

(i) Ceil from BST **

(ii) Floor from BST ***



arr = 1, 2, 5, 7, 8, 9, (3)

ceil value, floor value } key = 3

ceil >= key → 5, 3

floor <= key → 2, 3

Aptitude → Coding Questions :→

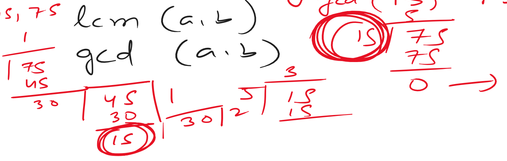
LCM × GCD (HCF) = product of 2 nos

(a, b) Euclid's Algo

lcm (a, b)

gcd (a, b)

gcd (15, 75)



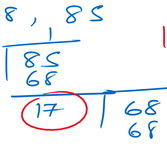
75, 15

gcd (b, a%b)

gcd (15, 0)

if b == 0 return a.

68, 85



lcm × gcd = a×b

gcd (a, b)

$$lcm(a,b) = \frac{a \times b}{gcd}$$

Degree

N = 5 [k = 1]

arr = { P, T, T, P, T }

P → Police → can only catch one thief

T → Thief

res = 0, 1, 2 == P

max

greedy algo

neighbours = 2

police = {0, 3} arr = [P T T P T]
thief = {1, 2, 4} 0 1 2 3 4

3 − 2 = 1

arr(0 − 1) = −1 = 1

<= k

Feedback code :→ 11241