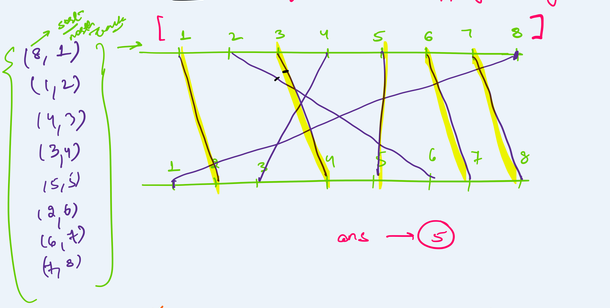
Q Maximum non-overlapping bridges

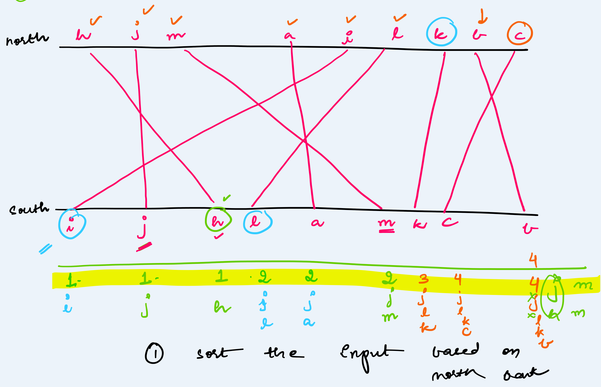
(n) → no. of bridges in a river

n pairs → north bank & south bank coordinates of bridge

Find max no. of non-overlapping bridges.



ans → 5

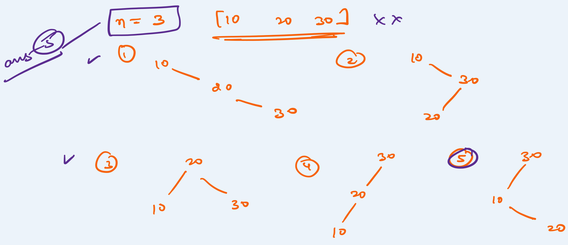


① sort the input based on north bank

Q Count no. of BST

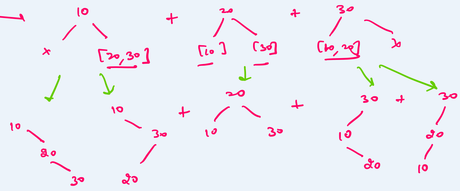
(n) → no. of ele.

find the no. of BST you can create using these elements.

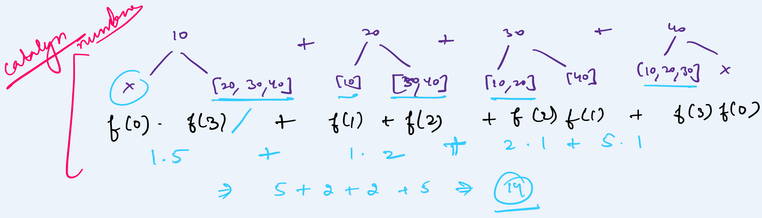


N	BSTs
1 [10]	1
2 [10, 20]	2
3 [10, 20, 30]	5
	14

4



4 [10, 20, 30, 40]



Q Perfect squares

n = 9 3^2 → 1

$10 = 1^2 + 3^2$ [2]

min no. of squares that sum to X.

$7 = 1^2 + 1^2 + 1^2 + 2^2$ [4]

$11 = 3^2 + 1^2 + 1^2$ [3]