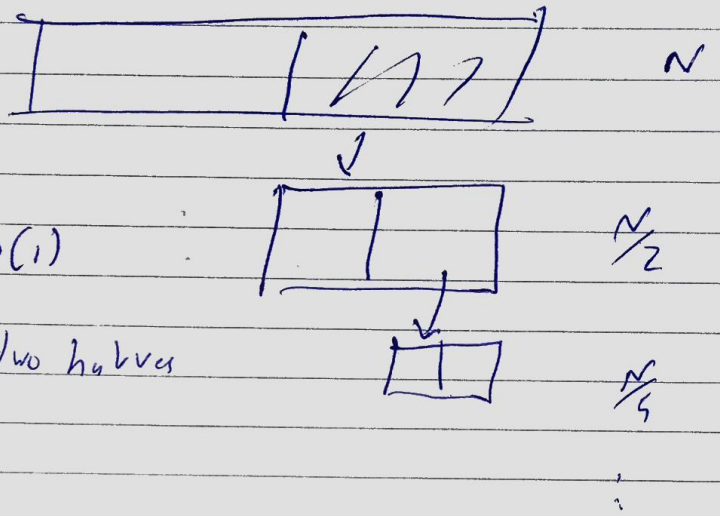
JANUARY 2021

20 WEDNESDAY

04 Wk / 020-345

Binary Search Using Recursion



① Comparing - O(1)

② Dividing into two halves

Recursion Relation :-

$$F(N) = O(1) + F\left(\frac{N}{2}\right)$$

Comparision

Dividing into two parts

Do not overthink in Recursion !

FEB' 21

Types of recurrence relation :-

① Linear recurrence relation - Fibonacci

8 am

② Divide and conquer → Search space is reduced by a factor

9 am

10 am

i.e → Binary search

11 am

Variables - ① Arguments → Going to next function call
② Return Type
③ Body of function

8 am
9 am
10 am
11 am
noon
1 pm
2 pm
3 pm
4 pm
5 pm
evening
7 pm

specific to one call

Body → In BS → var → start, end, mid

Determine size of arr

Will go to argument as it will be required in future method.

⇒ Variable in body which are only considerd valvable to next function call will be passed to next arguments

⇒ Variable wich is not need to pass future recurssion call put it on body only.

⇒ make sure to call recurssion call whenever there is return type