Class 27

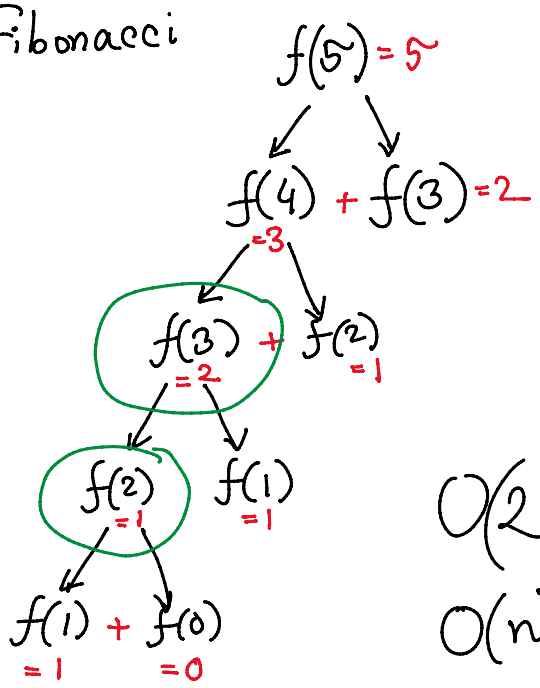
Thursday, December 30, 2021 8:54 PM

f(0) f(1)

0, 1, 1, 2, 3, 5, 8, ...,

Fibonacci

$f(n) = f(n-1) + f(n-2)$



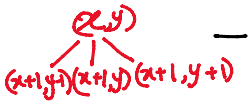
$1 \le T \le 10^5$

$1 \le n \le 10^{18}$

$O(2^n)$

$O(n)$

$O(\log N)$



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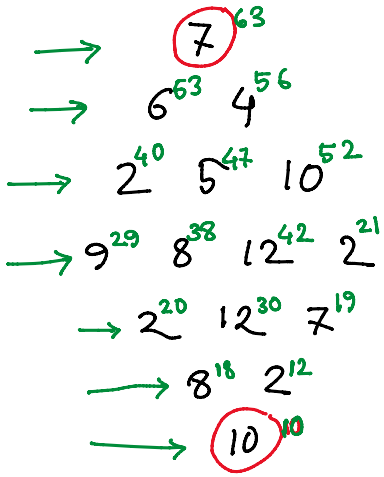
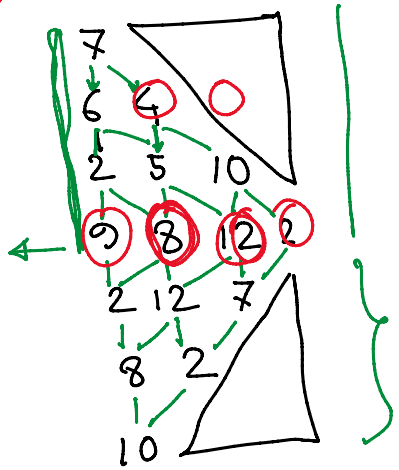




N = 4 → 7

N = 5 → 9

N = k → k + (k-1)

2k-1

1

2 3

4 5 6

7 8

9

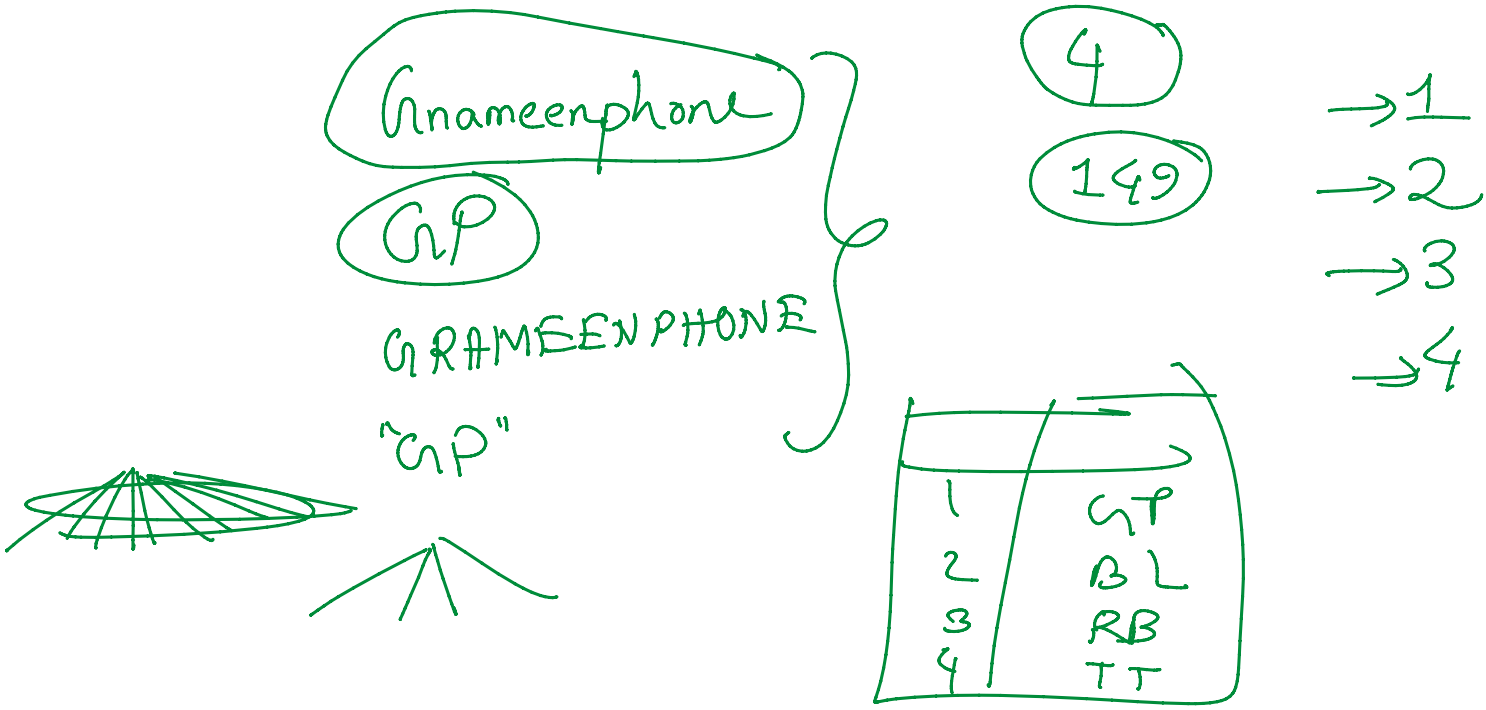
1 00	3 01	6 02
2 10	5 11	8 12
4 20	7 21	9 22

row taken

4 + 3 = 2n-1

5 + 2

6 + 1


Grameenphone
GP
GRAMEENPHONE
"GP"
4
149
→1
→2
→3
→4
1 GP
2 BL
3 RB
4 TT