1 [
2 [1
4 [2
8 [1

①f(3)
②f(2)
③f(1)   ⑥f(1)
④f(0) ⑤f(0)   ⑦f(0) ⑧f(0)
x   x   x

⑨f(2)
2   ⑩f(1)   ⑬f(1)
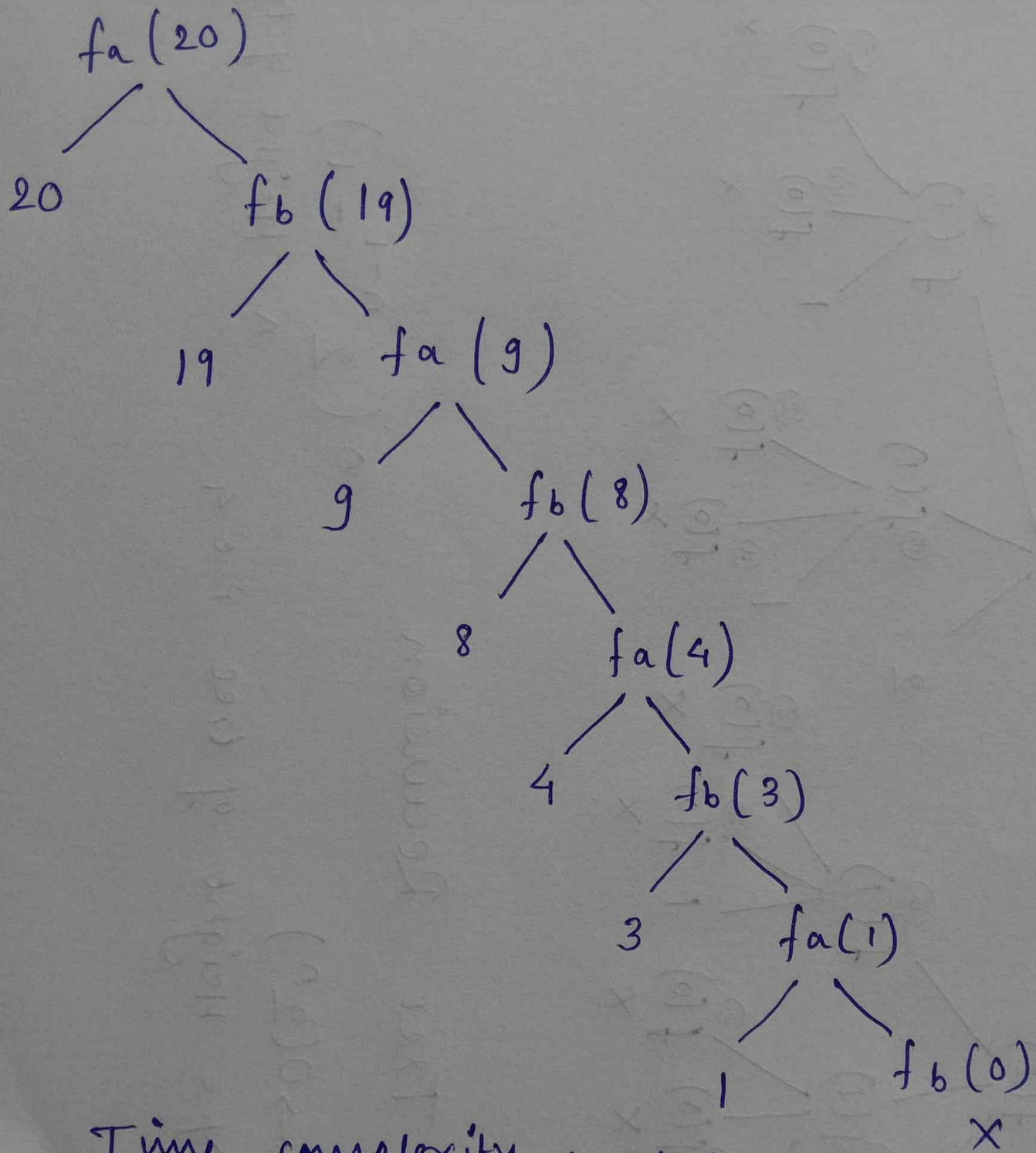1   ⑪f(0) ⑫f(0)   1 ⑭f(0) ⑮f(0)
    x   x   x   x

Tree Recursion

Time complexity → $O(2^n)$
Space complexity = Height of tree i.e 4.

$O(2^{n-1} - 1)$
n = Height of tree.

Indirect Recursion

fa (20)
- 20
- fb (19)
  - 19
  - fa (9)
    - 9
    - fb (8)
      - 8
      - fa(4)
        - 4
        - fb (3)
          - 3
          - fa(1)
            - 1
            - fb (0)
              - X

Time complexity → O(n)
Space complexity → O(n)