prb9_lnN_recur

Wednesday, November 1, 2023 8:26 PM

Problem 9) Recursive function. Provide code and test sufficiently.

Create 2 types of Power functions
(Hint for $O(\ln n)$ split into even and odd conditions)

$$y=x^n,(y(n)=O(n) \cap y(n)=O(\ln n)) \text{ where } y,x\in R, n\in N_0$$

↑ intersect

$y = x^n$,

$(y(n) = O(n)$ intersects with $y(n) = O(\ln n))$

where $y, x \in R, n \in N_0$

↳ the intersection of these two sets is the set containing elements that are common in both

↳ ~~y~~ is an element of $X \in R$ AND $n \in N_0$

X or y ?

For all values of n at and to the right of N_0, the value of y(n) lies between Big O and Ω lower bound