O(log N) basically means time goes up linearly while the n goes up exponentially. So if it takes 1second to compute 10 elements, it will take 2 seconds to compute 100 elements, 3 seconds to compute 1000 elements, and so on.

​It is O(log n) when we do divide and conquer type of algorithms e.g binary search. Another example is quick sort where each time we divide the array into two parts and each time it takes O(N) time to find a pivot element. Hence it N O(log N)

