

Figuring this out for every algorithm we would write would ultimately be unproductive.

Remember that the ultimate goal of Big O is to determine the major impacts on the runtime of an algorithm as the input scales.

In reality,  $O(N)$  algorithms aren't the same as one another, but **they scale in the same way as their inputs grow or shrink.**

```
1  let min = Number.POSITIVE_INFINITY
2  let max = Number.NEGATIVE_INFINITY
3  let arr = [10, 4, 2, 7, 9]
4
5  arr.forEach(num => {
6    if (num < min) min = num
7    if (num > max) max = num
8  })
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$O(\log(N))$

Logarithmic Complexity