# Dropping Non-Dominant Terms

## The big idea:

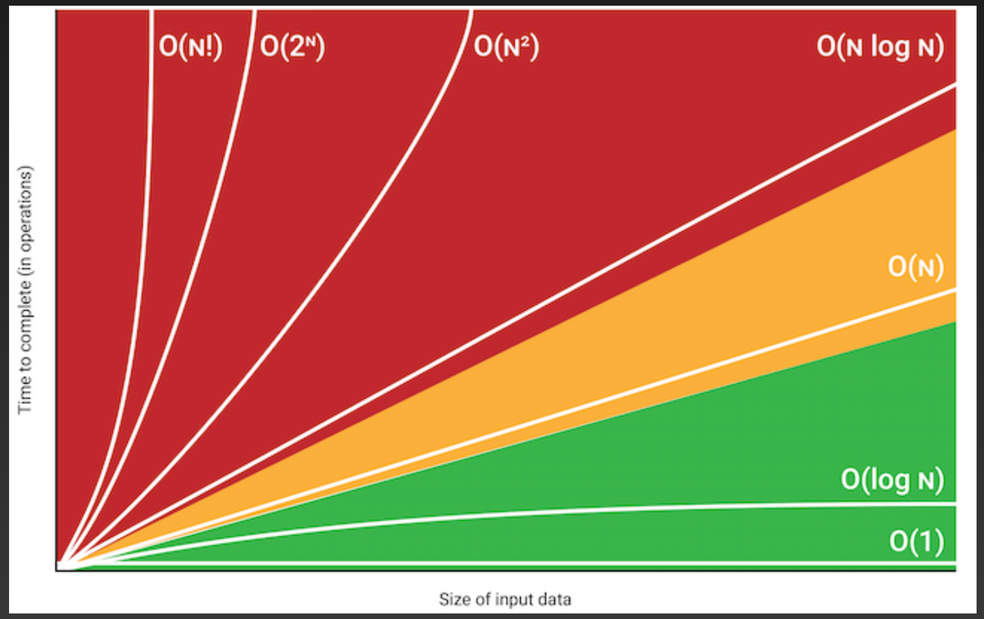
When calculating Big O we dispose of all but the most impactful terms. This previously used example of an $O(N^2)$ algorithm has an O(N) instruction appended to the end of it.

```
logArray([1,2,3,4,5])

function logArray(arr){
  for(let i=0; i<arr.length; i++){
    console.log(arr[i])
    for(let j=0; j<arr.length; j++){
      console.log('i: ', arr[i], 'j: ', arr[j])
    }
  }
  for(let i=0; i<arr.length; i++){
    console.log(arr[i])
  }
}
```

This instruction will continue to become less relevant as the input array grows.

Keep this chart in mind:




```
logArray([1,2,3,4,5])

function logArray(arr){
  for(let i=0; i<arr.length; i++){
    console.log(arr[i])
    for(let j=0; j<arr.length; j++){
      console.log('i: ', arr[i], 'j: ', arr[j])
    }
  }
  for(let i=0; i<arr.length; i++){
    console.log(arr[i])
  }
}
```