

Algorithms: Lab 3

Homework Problems

1). If we chose the element at index $n/2$ as our pivot instead of the last element, a sequence that is already sorted would run in $\theta(n \lg(n))$

$$\begin{aligned} O(n) &= O(\lg(n)) + O(n \lg(n)) \\ &= O(n \lg(n)) \end{aligned}$$