

Q1 (Page 13): Sorting + binary search takes $O(n \log n)$, while sequential search is $O(n)$. Why do we take the former approach?

Answer: Very good question. Here what we are showing is, searching could be made faster when things are in order: binary search $O(\log n)$ vs sequential search $O(n)$. In addition, if we perform searching very frequently, e.g., more than n times, then sorting + binary search is a better overall option as sorting just needs one-time effort.