

n : number of items in the data structures	Search	Insert	Delete	Get to the i th element	Find minimum	Find maximum
Unsorted array	$O(n)$	$O(n)$	$O(n)$	$O(1)$	$O(n)$	$O(n)$
Sorted array	$O(\log n)$	$O(n)$	$O(n)$	$O(1)$	$O(1)$	$O(1)$
Unsorted linked list	$O(n)$	$O(1)$ if done in the way done in the sample project	$O(n)$	$O(n)$	$O(n)$	$O(n)$
Sorted linked list	$O(n)$	$O(n)$	$O(n)$	$O(n)$	$O(1)$	$O(n)$
Binary search tree Worst-case: when the tree degenerates into a linked list → The height of the search tree is $O(n)$. On average → The height of the search tree is $O(\log n)$	Worst-case $O(n)$ On average $O(\log n)$	Worst-case $O(n)$ On average $O(\log n)$	Worst-case $O(n)$ On average $O(\log n)$	$O(n)$	Worst-case $O(n)$ On average $O(\log n)$	Worst-case $O(n)$ On average $O(\log n)$
Self-balancing variants of search trees such as red black trees , B trees	$O(\log n)$	$O(\log n)$	$O(\log n)$	N/A	$O(\log n)$	$O(\log n)$
Heap	$O(n)$	$O(1)$	$O(1)$	N/A	$O(1)$	$O(n)$
Hash table	$O(1)$	$O(1)$	$O(1)$	N/A	$O(n)$	$O(n)$

