

Data Structure	Operation	Best Case	Average Case	Worst Case
BST	Insert	$O(\log n)$	$O(\log n)$	$O(n)$
	Delete	$O(\log n)$	$O(\log n)$	$O(n)$
	Search	$O(\log n)$	$O(\log n)$	$O(n)$
AVL Tree	Insert	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Delete	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Search	$O(\log n)$	$O(\log n)$	$O(\log n)$
Splay Tree	Insert	$O(\log n)$	$O(\log n)$ amortized	$O(n)$
	Delete	$O(\log n)$	$O(\log n)$ amortized	$O(n)$
	Search	$O(1)$ (if recent)	$O(\log n)$ amortized	$O(n)$
Red-Black Tree	Insert	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Delete	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Search	$O(\log n)$	$O(\log n)$	$O(\log n)$
B-Tree (order m)	Insert	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Delete	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Search	$O(\log n)$	$O(\log n)$	$O(\log n)$
Hashing (Division Method)	Insert	$O(1)$	$O(1)$	$O(n)$ (with chaining)
	Delete	$O(1)$	$O(1)$	$O(n)$
	Search	$O(1)$	$O(1)$	$O(n)$
Heap (for Heap Sort)	Insert	$O(1)$	$O(\log n)$	$O(\log n)$
	Delete Max/Min	$O(\log n)$	$O(\log n)$	$O(\log n)$
	Search	$O(1)$ (top only)	$O(n)$	$O(n)$