List	Add	Remove	Get	Contains	Next	Data Structure
ArrayList	O(1)	O(n)	O(1)	O(n)	O(1)	Array
LinkedList	O(1)	O(1)	O(n)	O(n)	O(1)	Linked List
CopyOnWriteArrayList	O(n)	O(n)	O(1)	O(n)	O(1)	Array
Set	Add	Remove	Contains	Next	Size	Data Structure
HashSet	O(1)	O(1)	O(1)	O(h/n)	O(1)	Hash Table
LinkedHashSet	O(1)	O(1)	O(1)	O(1)	O(1)	Hash Table + Linked List
EnumSet	O(1)	O(1)	O(1)	O(1)	O(1)	Bit Vector
TreeSet	O(log n)	O(log n)	O(log n)	O(log n)	O(1)	Red-black tree
CopyOnWriteArraySet	O(n)	O(n)	O(n)	O(1)	O(1)	Array
ConcurrentSkipListSet	O(log n)	O(log n)	O(log n)	O(1)	O(n)	Skip List
Queue	Offer	Peek	Poll	Remove	Size	Data Structure
PriorityQueue	O(log n)	O(1)	O(log n)	O(n)	O(1)	Priority Heap
LinkedList	O(1)	O(1)	O(1)	O(1)	O(1)	Array
ArrayDequeue	O(1)	O(1)	O(1)	O(n)	O(1)	Linked List
ConcurrentLinkedQueue	O(1)	O(1)	O(1)	O(n)	O(n)	Linked List
ArrayBlockingQueue	O(1)	O(1)	O(1)	O(n)	O(1)	Array
PriorirityBlockingQueue	O(log n)	O(1)	O(log n)	O(n)	O(1)	Priority Heap
SynchronousQueue	O(1)	O(1)	O(1)	O(n)	O(1)	None!
DelayQueue	O(log n)	O(1)	O(log n)	O(n)	O(1)	Priority Heap
LinkedBlockingQueue	O(1)	O(1)	O(1)	O(n)	O(1)	Linked List
Map	Get	ContainsKey	Next	Data Structure		
HashMap	O(1)	O(1)	O(h/n)	Hash Table		
LinkedHashMap	O(1)	O(1)	O(1)	Hash Table + Linked List		
IdentityHashMap	O(1)	O(1)	O(h/n)	Array		
WeakHashMap	O(1)	O(1)	O(h/n)	Hash Table		
EnumMap	O(1)	O(1)	O(1)	Array		
TreeMap	O(log n)	O(log n)	O(log n)	Red-black tree		
ConcurrentHashMap	O(1)					
	O(1)	O(1)	O(h/n)	Hash Tables		
ConcurrentSkipListMap	O(I) O(log n)	O(1) O(log n)	O(h/n) O(1)	Hash Tables Skip List		
ConcurrentSkipListMap						
ConcurrentSkipListMap						
Sorting	O(log n)	O(log n)	O(1)	Skip List		
Sorting Algorithm	O(log n) Best	O(log n) Average	O(1) Worst	Skip List Space Complexity		
Sorting Algorithm Quicksort	O(log n)	O(log n)	O(1) Worst O(n^2)	Skip List		
Sorting Algorithm Quicksort Mergesort	O(log n) Best O(n log n) O(n log n)	Average O(n log n) O(n log n)	Worst O(n^2) O(n log n)	Skip List Space Complexity O(log n) O(n)		
Sorting Algorithm Quicksort Mergesort Timsort	O(log n) Best O(n log n)	O(log n) Average O(n log n)	O(1) Worst O(n^2)	Skip List Space Complexity O(log n)		
Sorting Algorithm Quicksort Mergesort Timsort Heapsort	O(log n) Best O(n log n) O(n log n) O(n) O(n log n)	Average O(n log n) O(n log n) O(n log n) O(n log n)	O(1) Worst O(n^2) O(n log n) O(n log n) O(n log n)	Skip List Space Complexity O(log n) O(n) O(n) O(1)		
Sorting Algorithm Quicksort Mergesort Timsort Heapsort Bubble Sort	O(log n) Best O(n log n) O(n log n) O(n) O(n log n) O(n)	Average O(n log n)	Worst O(n^2) O(n log n) O(n log n) O(n log n) O(n log n)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1)		
Sorting Algorithm Quicksort Mergesort Tirmsort Heapsort Bubble Sort Insertion Sort	O(log n) Best O(n log n) O(n log n) O(n) O(n log n)	Average O(n log n) O(n log n) O(n log n) O(n log n)	O(1) Worst O(n^2) O(n log n) O(n log n) O(n log n)	Skip List Space Complexity O(log n) O(n) O(n) O(1)		
Sorting Algorithm Quicksort Mergesort Tirmsort Heapsort Bubble Sort Insertion Sort	O(log n) Best O(n log n) O(n log n) O(n) O(n log n) O(n)	Average O(n log n)	Worst O(n^2) O(n log n) O(n log n) O(n log n) O(n log n)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1)		
Sorting Algorithm Quicksort Mergesort Timsort Heapsort Bubble Sort Insertion Sort Selection Sort	Best O(n log n) O(n log n) O(n log n) O(n) O(n log n) O(n) O(n) O(n)	Average O(n log n) O(n^2)	Worst O(n^2) O(n log n) O(n log n) O(n log n) O(n log n) O(n^2)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1) O(1)		
Sorting Algorithm Quicksort Mergesort Timsort Heapsort Bubble Sort Insertion Sort Selection Sort	Best O(n log n) O(n log n) O(n log n) O(n log n) O(n) O(n log n) O(n) O(n) O(n)	Average O(n log n) O(n log n) O(n log n) O(n log n) O(n^2) O(n^2) O(n^2) O(n^2)	O(1) Worst O(n^2) O(n log n) O(n log n) O(n log n) O(n %2) O(n^2)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1) O(1) O(1)		
Sorting Algorithm Quicksort Mergesort Timsort Heapsort Bubble Sort Insertion Sort Selection Sort Shell Sort	Best O(n log n) O(n log n) O(n log n) O(n log n) O(n) O(n) O(n) O(n) O(n) O(n) O(n) O(Average O(n log n) O(n log n) O(n log n) O(n log n) O(n^2) O(n^2) O(n^2) O(n^2)	O(1) Worst O(n^2) O(n log n) O(n log n) O(n log n) O(n^2) O(n^2) O(n^2) O(n^2)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1) O(1) O(1) O(1) O(1) O(1) O(1		
Sorting Algorithm Quicksort Mergesort Timsort Heapsort Bubble Sort Insertion Sort Selection Sort Tree Sort Shell Sort	Colog n	Average O(n log n) O(n log n) O(n log n) O(n log n) O(n^2) O(n^2) O(n^2) O(n^2) O(n log n) O(n log n)	Worst O(n'2) O(n log n) O(n log n) O(n 2) O(n'2) O(n'2) O(n'2) O(n'2) O(n'2) O(n'2)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1)		
Sorting Algorithm Quicksort Mergesort	D(log n)	O(log n) Average O(n log n) O(n log n) O(n log n) O(n log n) O(n^2) O(n^2) O(n^2) O(n log n)	Worst O(n°2) O(n log n) O(n log n) O(n 2) O(n°2) O(n°2) O(n°2) O(n°2) O(n°2) O(n°2) O(n°2) O(n°2)	Skip List Space Complexity O(log n) O(n) O(n) O(1) O(1) O(1) O(1) O(n) O(n) O(n) O(n)		



