Data Structure	Average Case - Time Complexity				Worst Case - Time Complexity				Space Complexity
	Access	Search	Insertion	Deletion	Access	Search	Insertion	Deletion	
Array	O(1)	O(N)	O(N)	O(N)	O(1)	O(N)	O(N)	O(N)	O(N)
Stack	O(N)	O(N)	O(1)	O(1)	O(N)	O(N)	O(1)	O(1)	O(N)
Queue	O(N)	O(N)	O(1)	O(1)	O(N)	O(N)	O(1)	O(1)	O(N)
Singly Linked list	O(N)	O(N)	O(1)	O(1)	O(N)	O(N)	O(1)	O(1)	O(N)
Doubly Linked List	O(N)	O(N)	O(1)	O(1)	O(N)	O(N)	O(1)	O(1)	O(N)
Hash Table	O(1)	O(1)	O(1)	O(1)	O(N)	O(N)	O(N)	O(N)	O(N)
Binary Search Tree	O(log N)	O(log N)	O(log N)	O(log N)	O(N)	O(N)	O(N)	O(N)	O(N)
AVL Tree	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(N)
B Tree	O(log N)	O(log N)	O(log N)	O(log N)	O(N)	O(N)	O(N)	O(N)	O(N)
Red Black Tree	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(log N)	O(N)
Graphs	Time Complexity								
	Storage	Add Vertex	Add Edge	Remove Vertex	Remove Edge	Query			
Adjacency list	O(|V|+|E|)	O(1)	O(1)	O(|V| + |E|)	O(|E|)	O(|V|)			
Incidence list	O(|V|+|E|)	O(1)	O(1)	O(|E|)	O(|E|)	O(|E|)			
Adjacency matrix	O(|V|^2)	O(|V|^2)	O(1)	O(|V|^2)	O(1)	O(1)			
Incidence matrix	O(|V| · |E|)	O(|V| · |E|)	O(|V| · |E|)	O(|V| · |E|)	O(|V| · |E|)	O(|E|)			
Heap	Time Complexity								
	Insert	Delete	Merge						
Binary Heap	O(log(n))	O(log(n))	O(m+n)						
Binomial Heap	O(1)	O(log(n))	O(log(n))						
Fibonacci Heap	O(1)	O(log(n))	O(1)						