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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Collections** | **Underlying**  **DataStructure** | **Implemented**  **Interface** | **Ordered** | **Ordered**  **by** | **Synchronized** | **NULL**  **Insertion** | **Initial**  **Capacity** | **Operations**  **Time**  **Complexity** |
| ArrayList | Growable Array | List | Yes | Index | NO | Yes | 10 | O(N) |
| LinkedList | Doubly Linked lIst,,Deque | List,Deque | Yes | Index | NO | Yes | 0 | O(1) |
| Vector | Growable Array | List | Yes | Index | Yes | Yes | 10 | O(N) |
| Stack | stack | List,Vector class | Yes | Insertion | NO | Yes | 10 | O(1) |
| PriorityQueue | Queue | Queue | Yes | Sorted | NO | NO | 11 | O(1) |
| ArrayDeqeue | Resizable Array | Deque | Yes | Insertion | NO | Yes | 16 | O(1) |
| HashSet | Hashtable | Set | NO |  | NO | Only One | 16 | O(1) |
| LinkedHashSet | Hashtable | Set | Yes | Index | NO | Only  One | 16 | O(1) |
| TreeSet | Red Black Tree | Set | Yes | Sorted | NO | NO | 16 | O(1) |
| HashMap | Hashtable | Map | NO |  | NO | Yes | 16 | O(1) |
| Hashtable | Dictionary | Map | NO |  | Yes | No | 11 | O(1) |
| TreeMap | Red Black  Tree | Map | YES | Sorted | NO | NO | 16 | O(logn) |
| LinkedHashMap | Hashtable | Map | Yes | Index | NO | YES | 16 | O(1) |
|  |  |  |  |  |  |  |  |  |