Data Structures Notes in java

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| S No. | Interface classes | Useful Methods |
| 1 | ArrayList<E> |  |
| 2 | ArrayDeque<E> |  |
| 3 | Arrays |  |
| 4 | BitSet |  |
| 5 | Date |  |
| 6 | EnumMap<K extends Enum<K>,V> |  |
| 7 | EnumSet<E extends Enum<E> > |  |
| 8 | HashMap<E,T> |  |
| 9 | HashSet<E> |  |
| 10 | Hashtable< K,V > |  |
| 11 | LinkedHashMap<E,T> |  |
| 12 | LinkedHashSet<E> |  |
| 13 | LinkedList<E> |  |
| 14 | PriorityQueue<E> |  |
| 15 | Random |  |
| 16 | Scanner |  |
| 17 | Stack<E> | push()  pop()  peek()  empty()  search()  contains() |
| 18 | TreeMap<E,T> |  |
| 19 | TreeSet<E> |  |
| 20 | Vector<E> |  |
| 21 | WeakHashMap<E,T> |  |
| 22 | Queue<E> | add()  offer()  peek()  element()  remove()  poll()  size()  contains()  isEmpty() |
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List of important Data Structures

1. Quick Sort
2. Merge Sort
3. Binary Search
4. Breadth First Search
5. Depth First Search
6. Suffix Array
7. Knuth-Morris-Pratt Algorithm (KMP)
8. Rabin-Karp Algorithm
9. Tries
10. Dijkstra’s Algorithm
11. Binary Indexed Tree
12. Segment Tree
13. Z algorithm
14. Floyd Warshall algorithm
15. Sparse Table
16. Heap/Priority Queue/Heapsort
17. Suffix Automaton:
18. Lowest Common Ancestor
19. Counting Inversions
20. Suffix Tree
21. Dynamic Programming
22. Basic Data Structures implementation like(LinkedList, stack , queues,etc.)
23. Graphs
24. Minimum Spanning Tree
25. Combinatorics
26. Union Find/Disjoint Set
27. Knapsack problem
28. Aho-Corasick String Matching Algorithm
29. Strongly Connected Components
30. Bellman ford Algorithm
31. Heavy-light Decomposition
32. Convex hull
33. Line Intersection
34. Interval Tree
35. Network flow
36. K-d tree
37. Binary search tree
38. Quick select
39. Treap/cartesian Tree
40. Game Theory
41. STL
42. Manacher’s Algorithm
43. LCP
44. Detecting Cycles in a graph
45. Geometry
46. Backtracking
47. Eulerian and Hamiltonian Paths
48. Graph coloring
49. Meet in the Middle
50. Johnson’s Algorithm
51. Recursion
52. Maximal Matching in a General Graph