

Data Structures – Big-O of operations in worst case

| Data structure        | contains(x) | add(x) | remove(x) |
|-----------------------|-------------|--------|-----------|
| ArrayList - unsorted  |             |        |           |
| ArrayList - sorted    |             |        |           |
| LinkedList - unsorted |             |        |           |
| LinkedList - sorted   |             |        |           |
| HashMap               |             |        |           |
| HashSet               |             |        |           |
| TreeSet               |             |        |           |
| Stack                 |             |        | remove()  |
| Queue                 |             |        | remove()  |
| Heap                  |             |        | remove()  |
| BST                   |             |        |           |
| AVL tree              |             |        |           |