

|               |   |
|---------------|---|
| Author:       | Popov A.                                  |
| Collections:  | [HashSet, TreeSet, ArrayList, LinkedList] |
| Observations: | 100                                       |

**Table #1 (Capacity: 10000)**

|            | HashSet   | TreeSet   | ArrayList | LinkedList |
|------------|-----------|-----------|-----------|------------|
| Populate   | 0.9899 ms | 2.7301 ms | 0.0446 ms | 0.3406 ms  |
| Add        | 4.0E-4 ms | 6.0E-4 ms | 0.0589 ms | 9.0E-4 ms  |
| Contains   | 0.001 ms  | 0.0029 ms | 0.0626 ms | 0.0629 ms  |
| Remove     | 0.002 ms  | 0.0023 ms | 0.0667 ms | 0.0581 ms  |
| Get        |           |           | 3.0E-4 ms | 0.0157 ms  |
| IterAdd    |           |           | 0.0144 ms | 0.003 ms   |
| IterRemove |           |           | 0.0118 ms | 0.0021 ms  |

**Table #2 (Capacity: 100000)**

|            | HashSet    | TreeSet    | ArrayList | LinkedList |
|------------|------------|------------|-----------|------------|
| Populate   | 16.9568 ms | 44.8909 ms | 0.5872 ms | 11.5417 ms |
| Add        | 0.0011 ms  | 0.0015 ms  | 0.6347 ms | 0.0041 ms  |
| Contains   | 0.0041 ms  | 0.0028 ms  | 0.6638 ms | 1.0072 ms  |
| Remove     | 0.0063 ms  | 0.0039 ms  | 0.6683 ms | 0.6974 ms  |
| Get        |            |            | 4.0E-4 ms | 0.0261 ms  |
| IterAdd    |            |            | 0.1028 ms | 0.0052 ms  |
| IterRemove |            |            | 0.0976 ms | 0.0025 ms  |

**Table #3 (Capacity: 1000000)**

|            | HashSet    | TreeSet      | ArrayList  | LinkedList |
|------------|------------|--------------|------------|------------|
| Populate   | 362.142 ms | 1178.5011 ms | 8.8119 ms  | 90.9488 ms |
| Add        | 0.0014 ms  | 0.0024 ms    | 16.0932 ms | 0.0062 ms  |
| Contains   | 0.0049 ms  | 0.0031 ms    | 9.5521 ms  | 14.3996 ms |
| Remove     | 0.0068 ms  | 0.0042 ms    | 9.2358 ms  | 12.9926 ms |
| Get        |            |              | 0.0014 ms  | 0.0608 ms  |
| IterAdd    |            |              | 1.2044 ms  | 0.0065 ms  |
| IterRemove |            |              | 0.934 ms   | 0.0025 ms  |