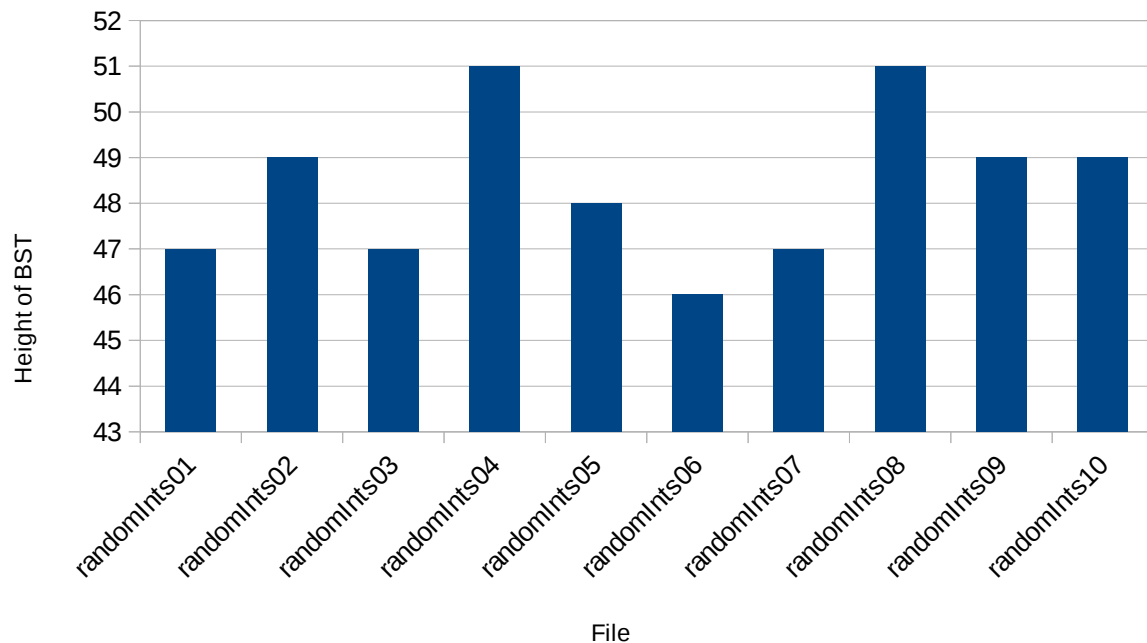


| File | Height | Duplicates | Duncan Van Keulen |
|--------------|---------------|-------------------|-------------------|
| randomInts01 | 47 | 0 | |
| randomInts02 | 49 | 0 | |
| randomInts03 | 47 | 0 | |
| randomInts04 | 51 | 0 | |
| randomInts05 | 48 | 0 | |
| randomInts06 | 46 | 0 | |
| randomInts07 | 47 | 0 | |
| randomInts08 | 51 | 0 | |
| randomInts09 | 49 | 0 | |
| randomInts10 | 49 | 0 | |

Stats

| | |
|--------------------|-------------|
| Maximum | 51 |
| Minimum | 46 |
| Average | 48.4 |
| Median | 48.5 |
| Standard Deviation | 1.712697677 |

**Questions:**

1. $\lg(n)$ is a better approximation of the time complexity because 45-50 is a lot closer to 20 ($\lg(1000000)$) than 1000000
2. There is not a lot of variance in the height of the trees (~ 2). A "default" BST performs best with random data, and since all of the given data was random, it's not really that surprising that it would perform similarly on each.
3. There weren't any duplicates in any of the files, which isn't really that surprising even considering that there were ten million 64 bit integers – that's a lot of options
4. The "a" value of the time complexity looks to be about 2.25 because $\lg(1000000) = 20$ and $2.25 * 20 = 45$ and that's around the heights of the BST's after a million values