Comparing JMH and manual performance measurements

# Java

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| --- | --- | --- |
| Algorithm | Manual | JMH |
| BSTinsert | 6.53 | - |
| BSTremove | 5.68 | 74.836 |
| countingSort | 9.946 | 85.498 |
| insertionSort | 68.52 | 83.952 |
| mergeSort | 5.87 | 71 |
| gradientBitmap | 27.82 | 55.13 |

# Kotlin

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| --- | --- | --- |
| Algorithm | Manual | JMH |
| BSTinsert | 35.26 | 74.467 |
| BSTremove | 6.47 | 84.358 |
| countingSort | 5.33 | 118.904 |
| insertionSort | 40.126 | 116.236 |
| mergeSort | 34.31 | 69.092 |

# 

# Dart

|  |  |  |
| --- | --- | --- |
| Algorithm | Manual | JMH |
| countingSort | 1.918 | 122.314 |
| insertionSort | 221.513 | 119.885 |
| mergeSort | 8.683 | 102.449 |
| gradientBitmap | 45.124 | 104.816 |

# Summary

As we can see, in most cases the results given from JMH are much higher than the measured from the PL itself except for some abnormally high **insertionSort** result for Dart. Moreover, the JMH values are not representative among themselves (**countingSort** somehow takes more time than **insertionSort**) and therefore cannot be considered as a good characteristic for comparing programming languages.