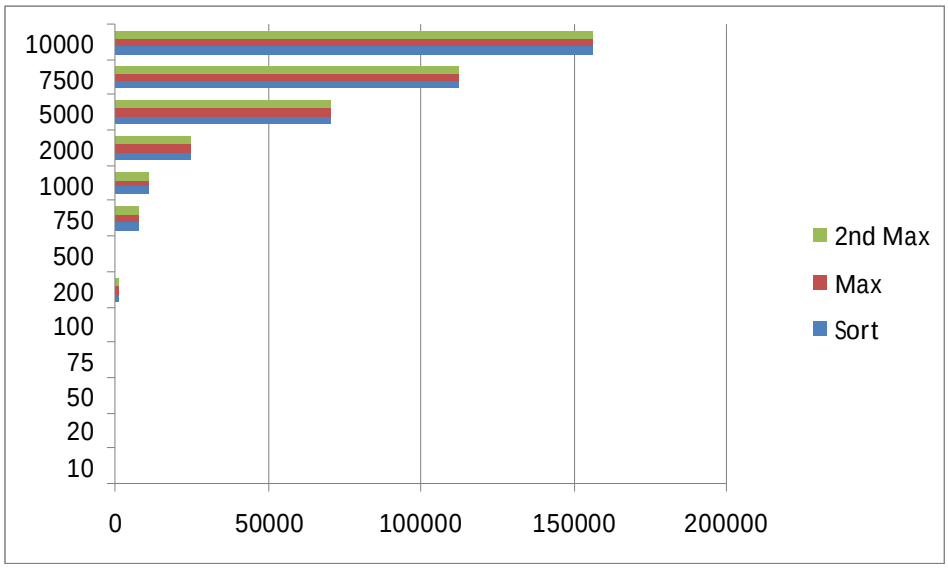
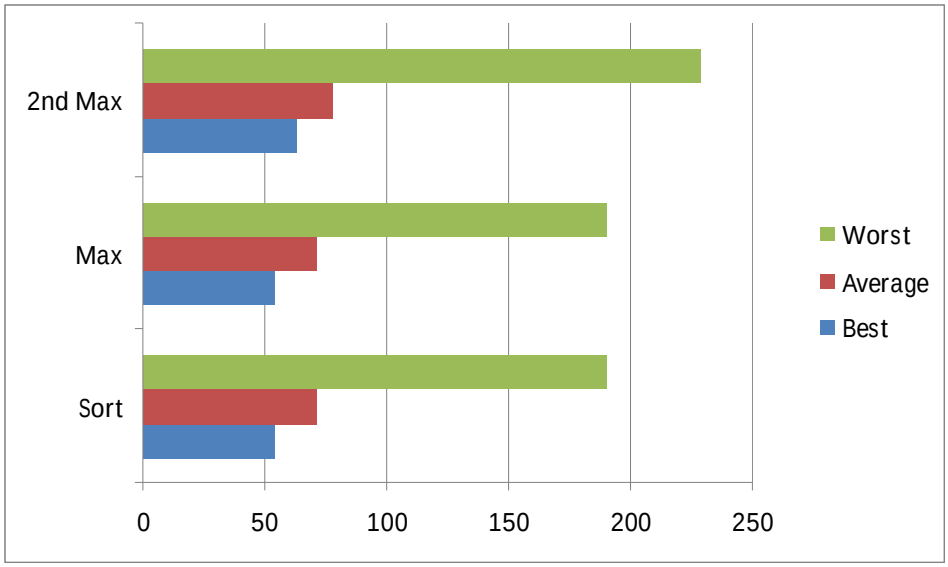
Tyler Holland
Spencer Ellsworth



(Note for above chart, the y-axis is the independent variable, representing the number of inputs.) When performing Study 1 of Task 1, here is what we found. Because most of the comparisons were done while creating the tree, nearly everything looks the same. From this study, we do not see significant differences between the three methods.



When performing Study 2 of Task 1, here is what we found. Our worst case array had the highest number of comparisons, as expected, while the best case scenario had the lowest number of comparisons. From the charts above, you can see that the best case scenario was not a great deal better than our average case (whose arrays were created using a random number generator), while the worst case scenario had twice as many comparisons as the randomly-generated, average case.

For Task 2, we ran into technical issues and were unable to complete this section of the lab. We believe our algorithm for finding the max is broken or incorrectly written.