Zachary Handel- Binary Search Tree Data Analysis

This data is representing three different scenarios of binary search tree data. As we can see in the top graph, if the data is not randomized, we get a case scenario of O(N). This comes to show that binary search trees are non-efficient when working with linear data. In the second graph, only some of the data within the binary search tree is randomized. This shows a closer, more efficient result that is between O(N) and O(LogN). Finally, the last graph shows the best-case scenario when we have random data. It gives us a situation of O(LogN) and this shows that binary search trees are most efficient with random data.