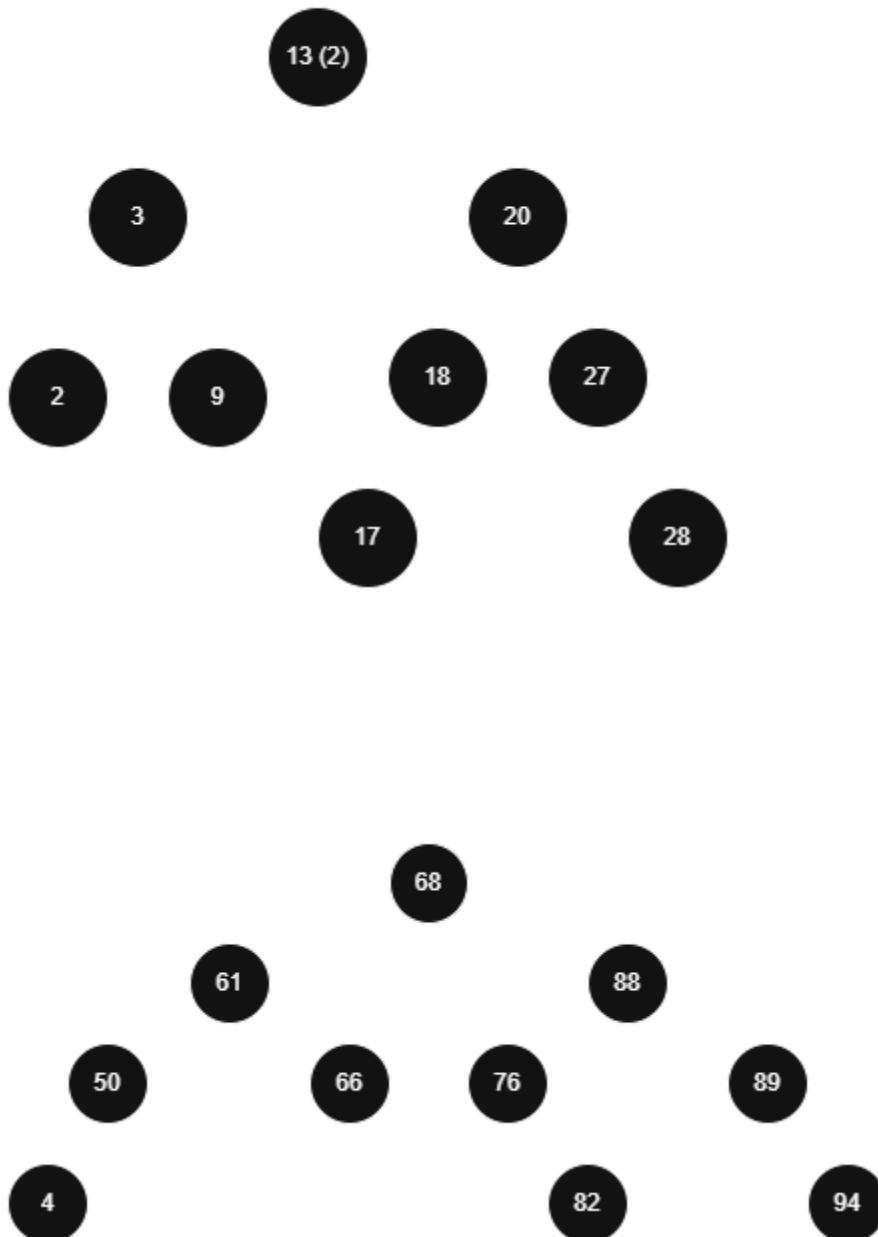
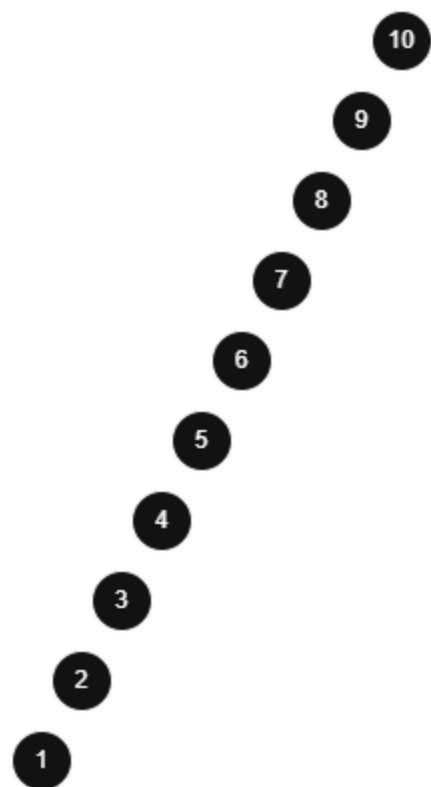
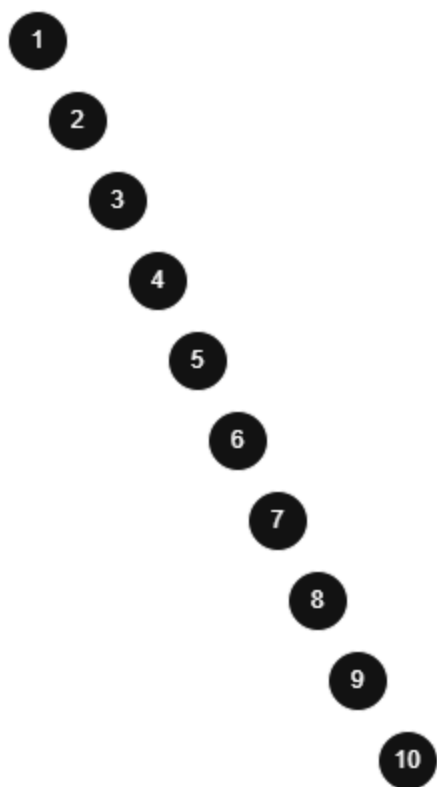


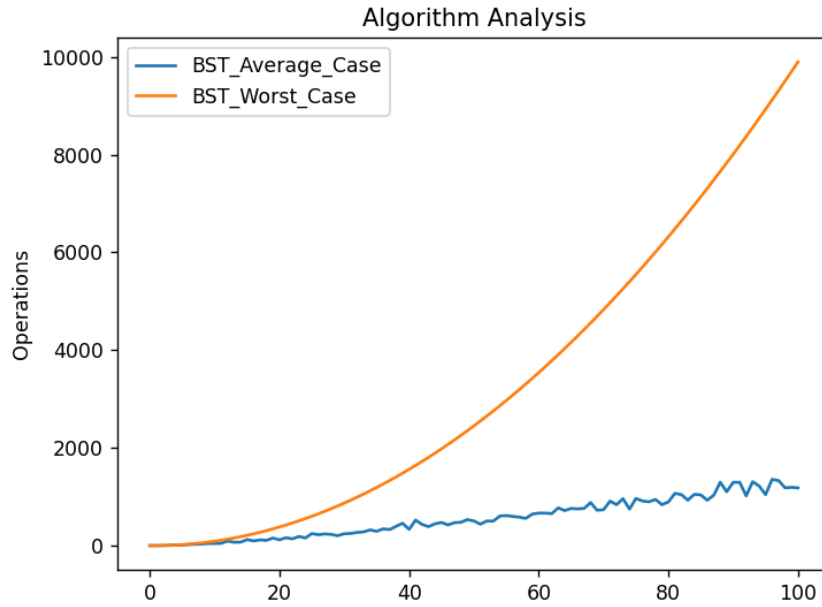
Task One





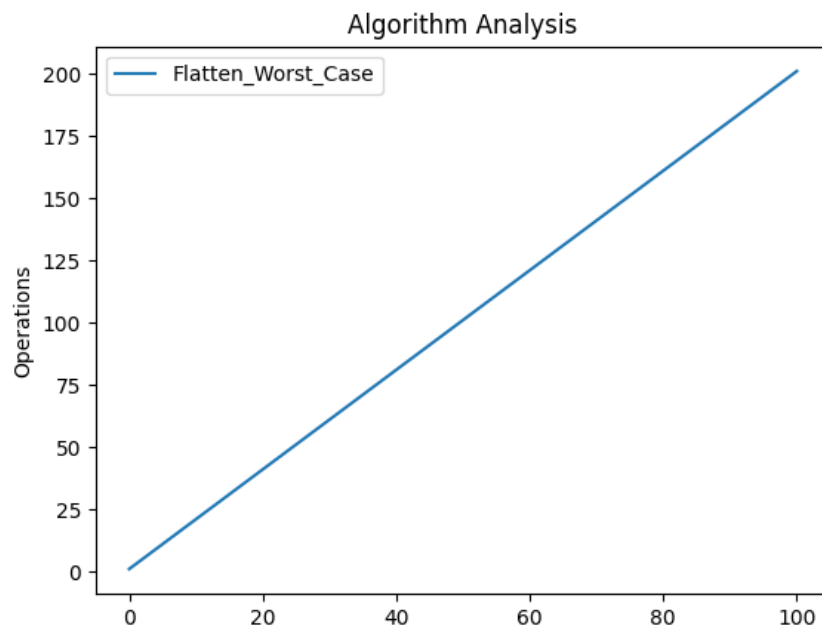
Task Two

Average and Worst-Case BST



The graph shows the performance degradation when the Binary Search Tree is out of balance. This is because if a tree is out of balance, traversing the tree doesn't cut the tree in half each time, which is necessary to maintain a performance of $O(\log n)$. While inserts in worst case are $O(n)$, building a tree is $O(n^2)$, as shown in the graph.

Flatten



Flatten is $O(n)$, because it is a tree traversal. It will read however many nodes are in the tree and write them to the list.