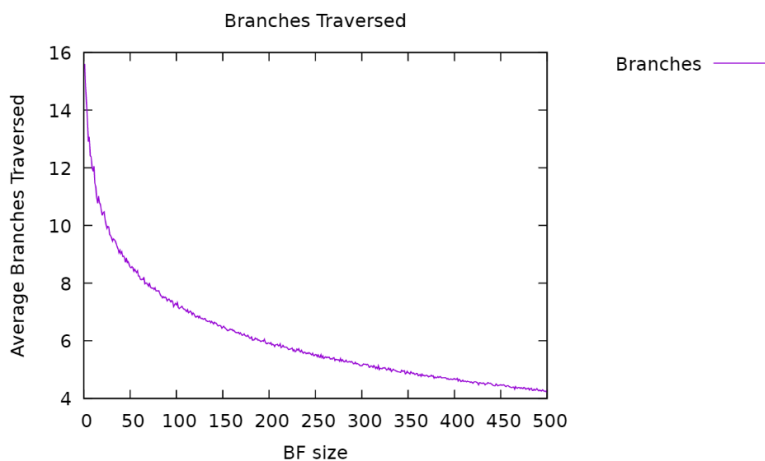
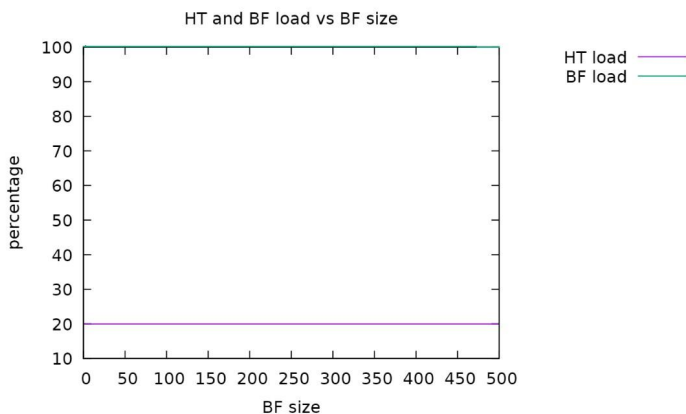


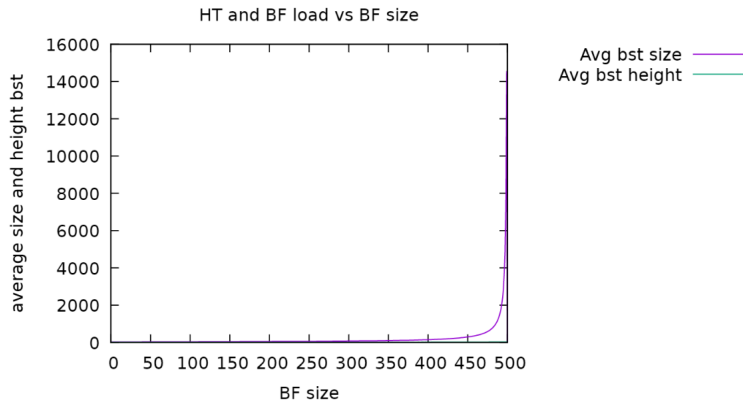
The Average BST Size vs Height graph demonstrates the Average BST height and size while the Hash Table size increases. We can see that at the start the size of the average BST starts off very high, however as the hashtable continues to grow each BST's size grows smaller and smaller. This is due to the fact that with a larger Hash Table there are more indices to store each node and they won't require the same BST. The Height of a BST on average slowly decreases as there are more indices.



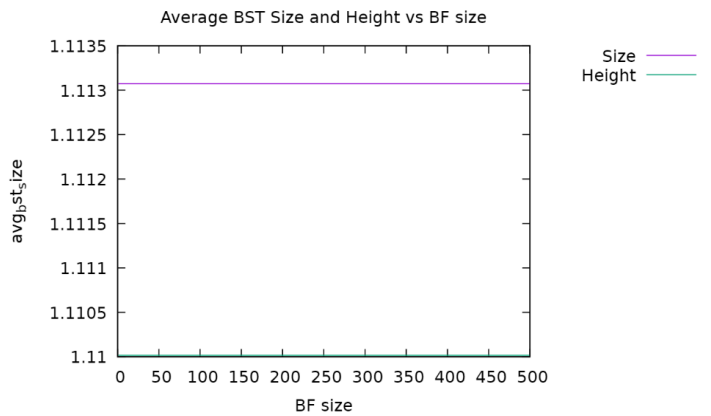
The Branches Traversed graph shows the average branches that are traversed which represent accessing BST and accessing the children nodes. As the BloomFilter and HashTable both increase in size the likelihood of false positives and the necessity of traversing through BST decreases and there are more indices that all for banhammer to immediately access.



This graph demonstrates how overall the Bloom Filter load and Hash Table load percentage remains unchanged as Bloom Filter size increases because the count and size are directly linked with one another.



This graph represents the increasing Bloom Filter Size while having a decreasing Hash Table. This shows how as the Bloom Filter increases there are less collisions and as Hash Table decreases the BST's are required to store more nodes.



This graph shows that since the script that was passed through was less than the size of the Bloom Filter and Hash Table size there is a close to the 1 average for both size and height of BST. This determines an almost one to one ratio of indices to bst. The averages are slightly higher than 1 due to the fact that there is occasionally collisions that have larger BST's