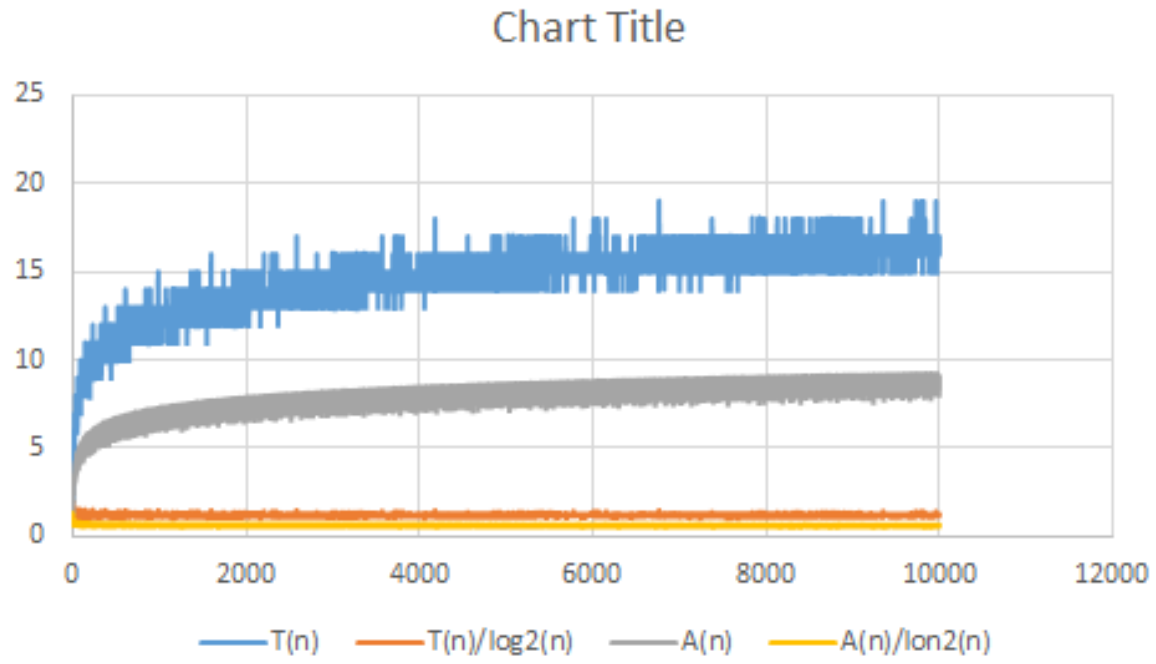

Conclusion:

As the graph of T(n)/log2(n) and A(n)/log2(n) is constant and not zero.

The T(n) (Worst case) and the A(n) (Average Case) both have the same growth rate as of log2(n).

So, A(n) = T(n) = O(log2(n))