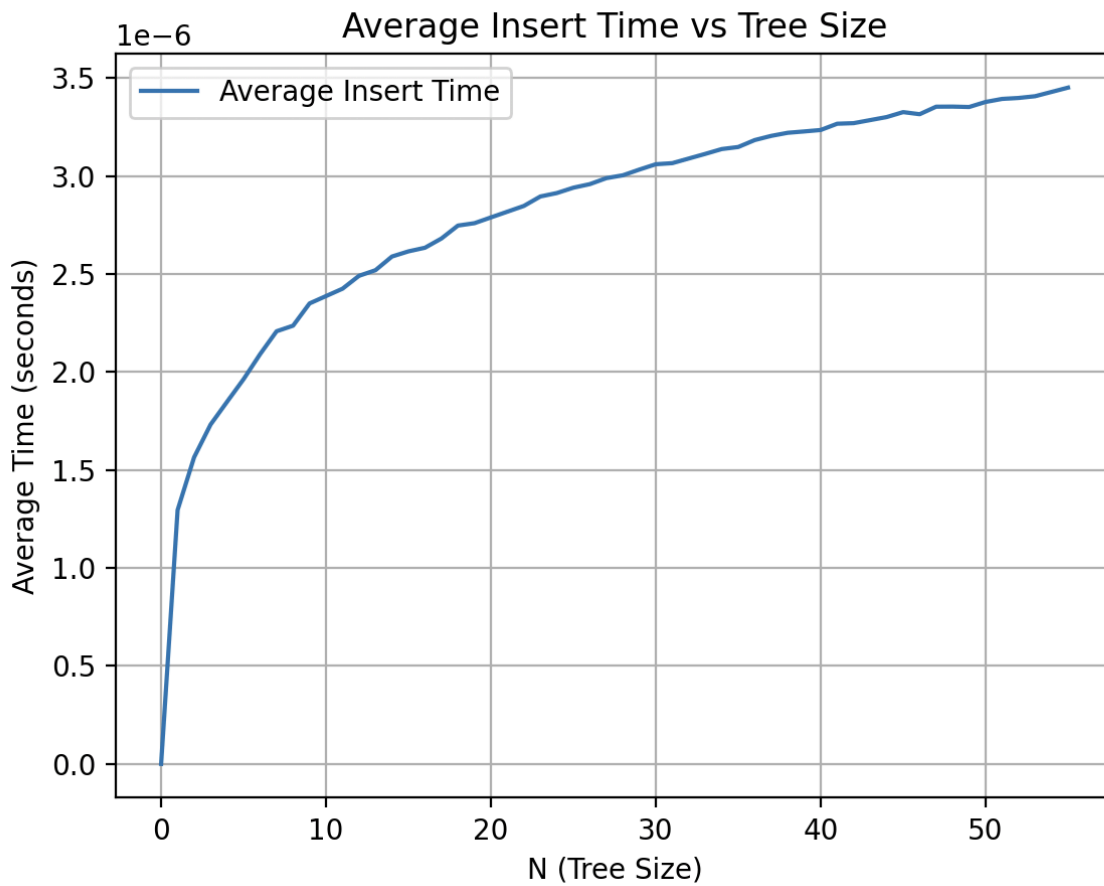


This graph represents a logarithmic relationship between average height and tree size. This makes sense because every new level cuts the rate at which the height increases by half.



This graph represents a logarithmic relationship between average insert time and tree size. This makes sense because when you have an essentially balanced tree, you need to go down a number of levels proportional to the logarithm of the number of nodes ($\log N$) to find the correct insertion point.