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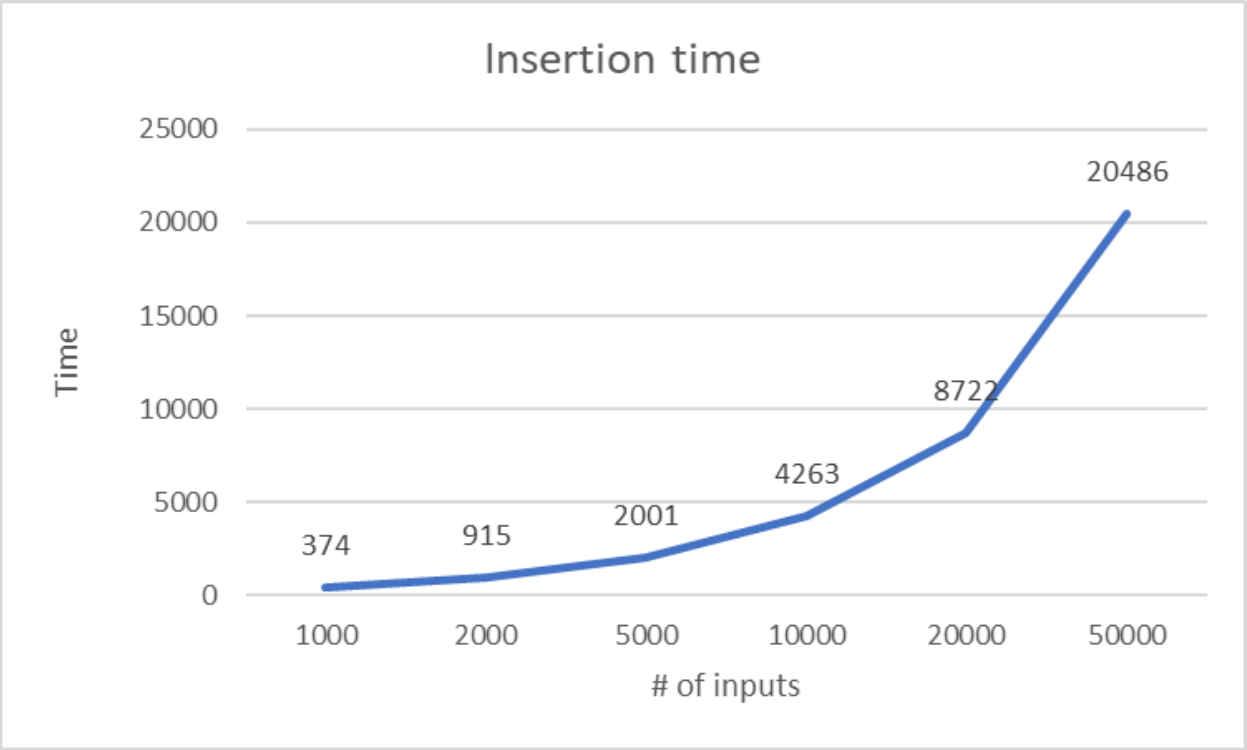
3)



4)

AVL Tree

Number of inputs	Inorder order	Random order	Reverse order
50,000	12,993 microseconds	20,260 microseconds	16,246 microseconds
50,000	13,772 microseconds	24,383 microseconds	14,787 microseconds
50,000	14,432 microseconds	20,982 microseconds	15,386 microseconds
Average	13,732 microseconds	21,875 microseconds	15,473 microseconds

Skiplist

Number of inputs	Inorder order	Random order	Reverse order
50,000	137,507 microseconds	72,028 microseconds	25,305 microseconds
50,000	140,161 microseconds	77,967 microseconds	29,023 microseconds
50,000	142,117 microseconds	76,376 microseconds	25,305 microseconds
Average	139,928 microseconds	75,457 microseconds	26,544 microseconds

5) 3中的折线图符合AVL在插入时的理论时间复杂度的这个规律（当inputs越多，时间也越大）。4中的数据符合在随机、顺序、逆序下正常应该是谁快谁慢的一个规律（AVL正常情况下三者都快）。在我们这种情况下，随机、顺序、逆序在任何输入下都是用AVL实现。