

Comparison

Note: This comparison is generated using a shorter data set with just 20,000 entries rather than the actual dictionary data set of 450,000 entries.

Reason: Implementing the BST is very fast but in case of AVL initialization in dictionary, the time taken to load the complete data set is much as 25 to 30 minutes since the tree is balanced after every insertion. TEXT FILE USED = “Words2.txt”

#	Word	Time(sec) taken by BST (t1)	Time(sec) taken by AVL (t2)	Difference (dt= t1-t2)	Percentage decrease ((dt/t1)*100)
1	alvarado	2.3e-05sec	2.3e-05sec	0	0
2	bostic	2e-05sec	2e-06sec	0	0
3	cuittikin	2e-05sec	2e-06sec	0	0
4	de-americanize	7e-05sec	2e-06sec	5e-05sec	71.4%
5	exampless	3e-05sec	2e-06sec	1e-05sec	33.3%
6	foster-father	2e-05sec	1e-06sec	1e-05sec	50%
7	gabionage	4e-05sec	2e-06sec	2e-05sec	50%
8	hickman	4e-05sec	3e-06sec	1e-05sec	25%
9	intercupola	3e-05sec	3e-06sec	0	0
10	jointy	4e-05sec	3e-06sec	1e-05sec	25%
11	kinks	3e-05sec	3e-06sec	0	0
12	lecithic	4e-05sec	4e-06sec	0	0
13	mammillary	4e-05sec	2e-06sec	2e-05sec	50%
14	nonmateriality	3e-05sec	2e-06sec	1e-05sec	33.3%
15	out-of-the-world	3e-05sec	3e-06sec	0	0
16	pervaded	3e-05sec	2e-06sec	1e-05sec	33.3%
17	quasi-actively	3e-05sec	2e-06sec	1e-05sec	33.3%
18	residencer	3e-05sec	3e-06sec	0	0
19	slivovic	2e-05sec	2e-06sec	0	0
20	twice-dared	4e-05sec	3e-06sec	1e-05sec	25%
21	unilingualism	3e-05sec	3e-06sec	0	0
22	vice-director	3e-05sec	3e-06sec	0	0
23	watchmanship	3e-05sec	3e-06sec	0	0
24	xanthippe	3e-05sec	3e-06sec	0	0
25	yamani	4e-05sec	3e-06sec	1e-05sec	25%
26	zellamae	4e-05sec	2e-06sec	2e-05sec	50%