

Average heights over 100 random trials

random permutations

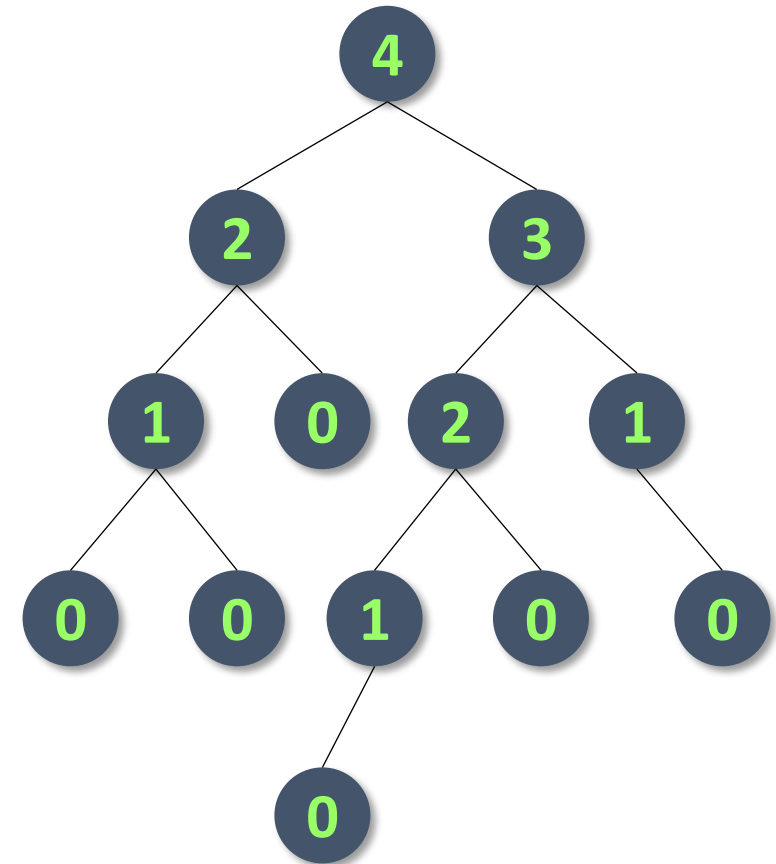
n	2^n	BST	AVL	
10	1,024	21	11	0.523
11	2,048	24	12	0.500
12	4,096	26	13	0.500
13	8,192	29	14	0.483
14	16,384	32	15	0.469
15	32,768	35	17	0.486
16	65,536	38	18	0.477
17	131,072	41	19	0.463
18	262,144	43	20	0.465
19	524,128			
20	1,048,576			

Average heights over 10 random trials

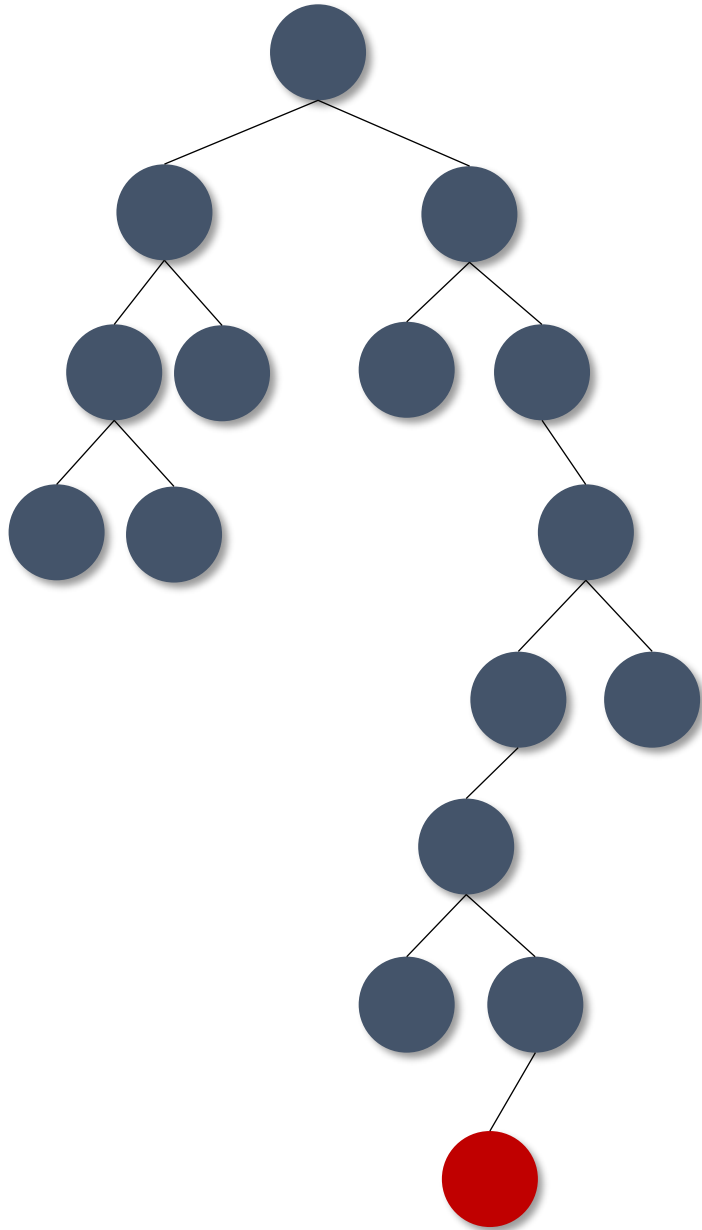
n	2 ⁿ	n inversions		100n inversions	
		BST	AVL	BST	AVL
10	1,024	464	10	101	11
11	2,048	933	11	99	12
12	4,096	1,850	12	142	13
13	8,192	3,717	13	281	14
14	16,384	7,407	14	557	15
15	32,768	14,788	15	1,122	16
16	65,536	29,537	16	2,226	17
17	131,072			4,451	18
18	262,144				
19	524,128				
20	1,048,576				

AVL balance property

- Siblings differ in height by at most 1.



AVLX weak balance property



AVLX weak balance property

