

	<i>#nodes</i>	<i>Uniform Distribution (avg lookup cycles)</i>	<i>Zipfian Distribution (avg lookup cycles)</i>	<i>Speedup (zip over uniform)</i>	<i>Avg Speedup (zip over uniform)</i>
Exp. 1	1000	847	625	26.21%	28.32%
Exp. 2	1000	860	621	27.79%	
Exp. 3	1000	862	617	28.42%	
Exp. 4	1000	867	608	29.87%	
Exp. 5	1000	846	598	29.31%	
Exp. 6	10000	1398	1135	18.81%	31.01%
Exp. 7	10000	1428	908	36.41%	
Exp. 8	10000	1439	979	31.97%	
Exp. 9	10000	1511	1082	28.39%	
Exp. 10	10000	1533	928	39.47%	
Exp. 11	100000	2287	1546	32.40%	39.90%
Exp. 12	100000	2406	1543	35.87%	
Exp. 13	100000	3177	1525	52.00%	
Exp. 14	100000	2389	1446	39.47%	
Exp. 15	100000	2493	1502	39.75%	
Exp. 16	1000000	3078	1782	42.11%	38.76%
Exp. 17	1000000	2815	1841	34.60%	
Exp. 18	1000000	3177	1847	41.86%	
Exp. 19	1000000	3170	2052	35.27%	
Exp. 20	1000000	2954	1774	39.95%	

Note: The number of nodes, number of lookups and range of the nodes are all the same.

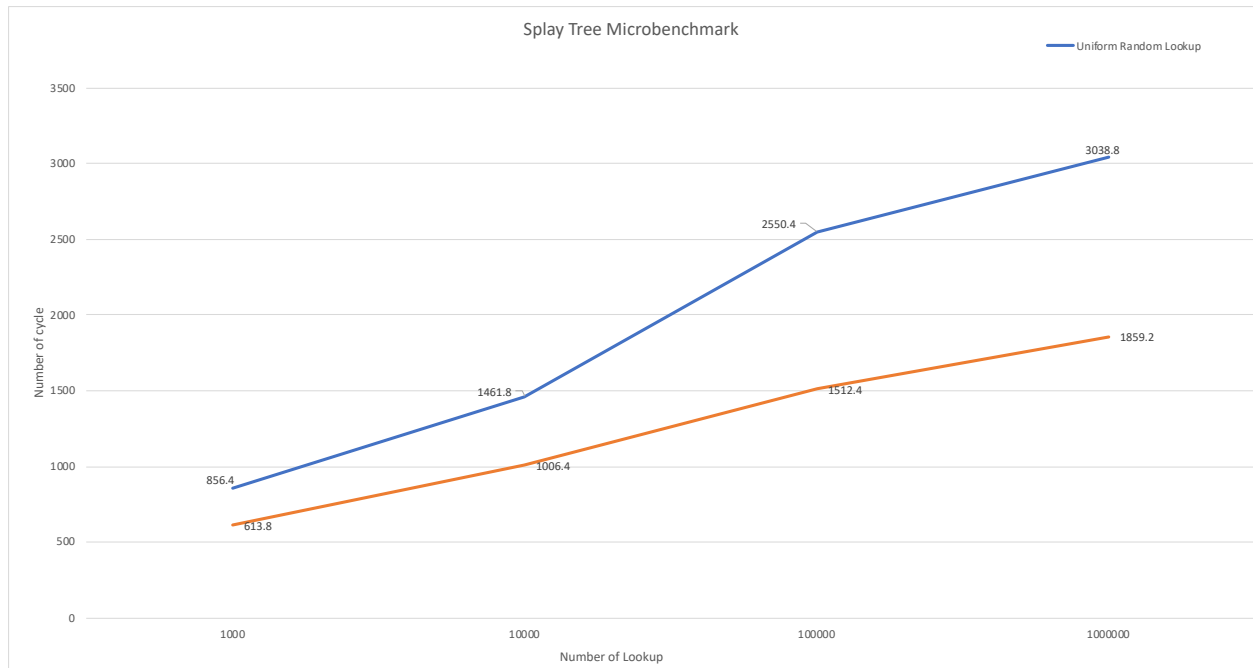


Figure 1. graph shows average lookup for uniform and Zipfian distribution (low number favored) workload, with spay tree data structure. For each experiment, number of lookup, number of nodes inserted and range of the node value are all the same.