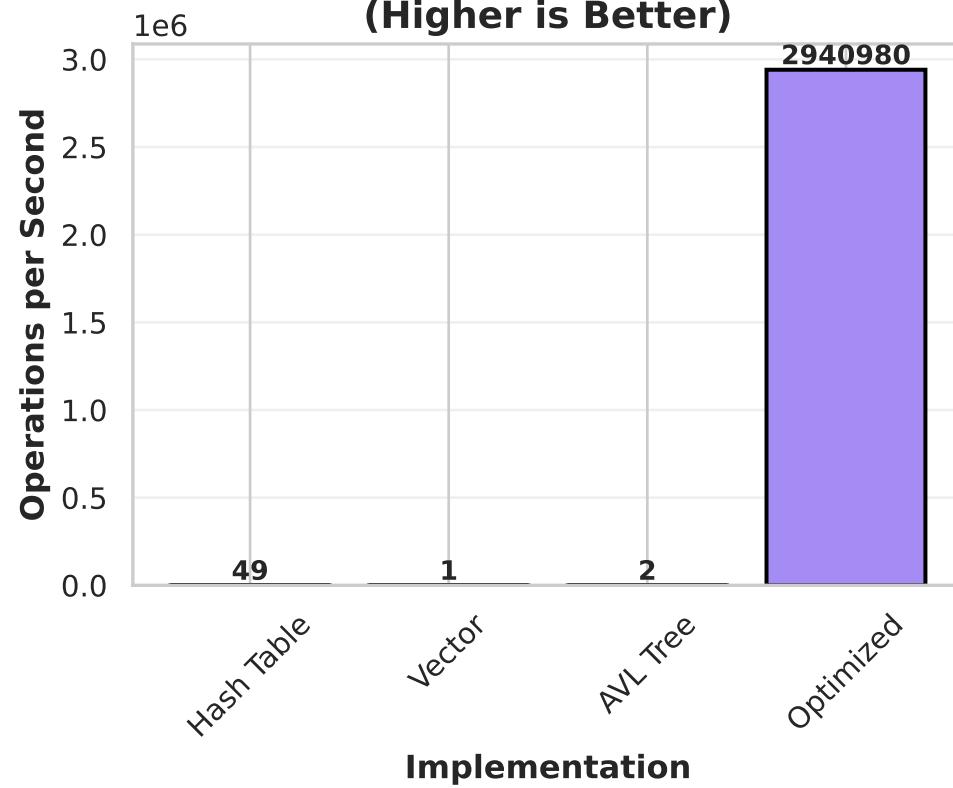
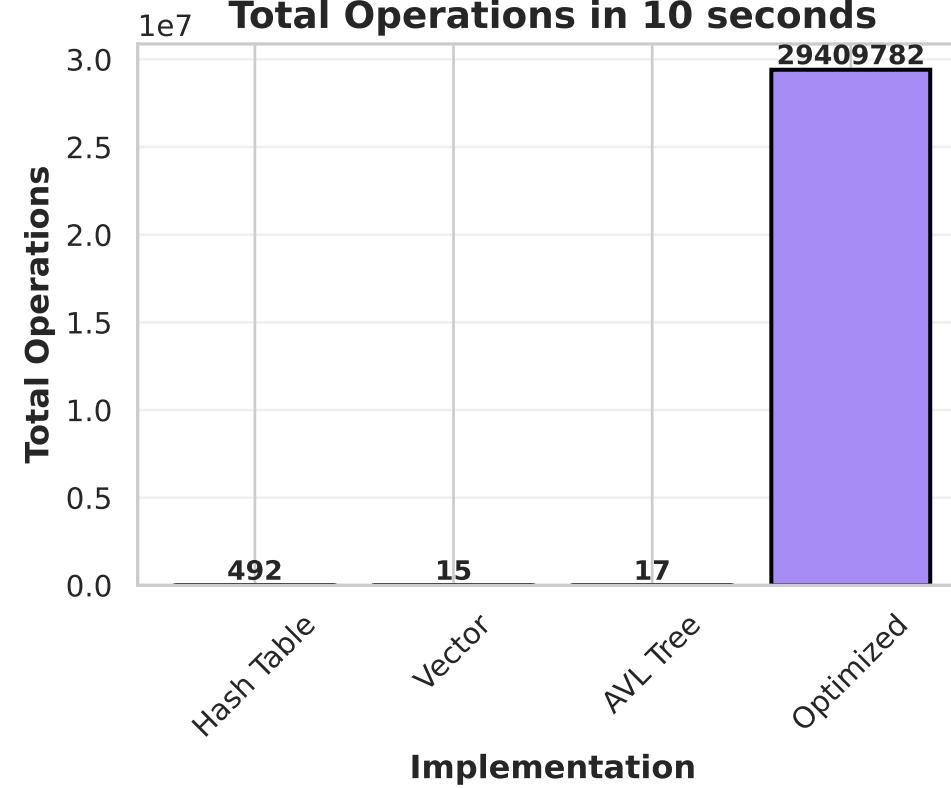


# Data Structures Performance Analysis

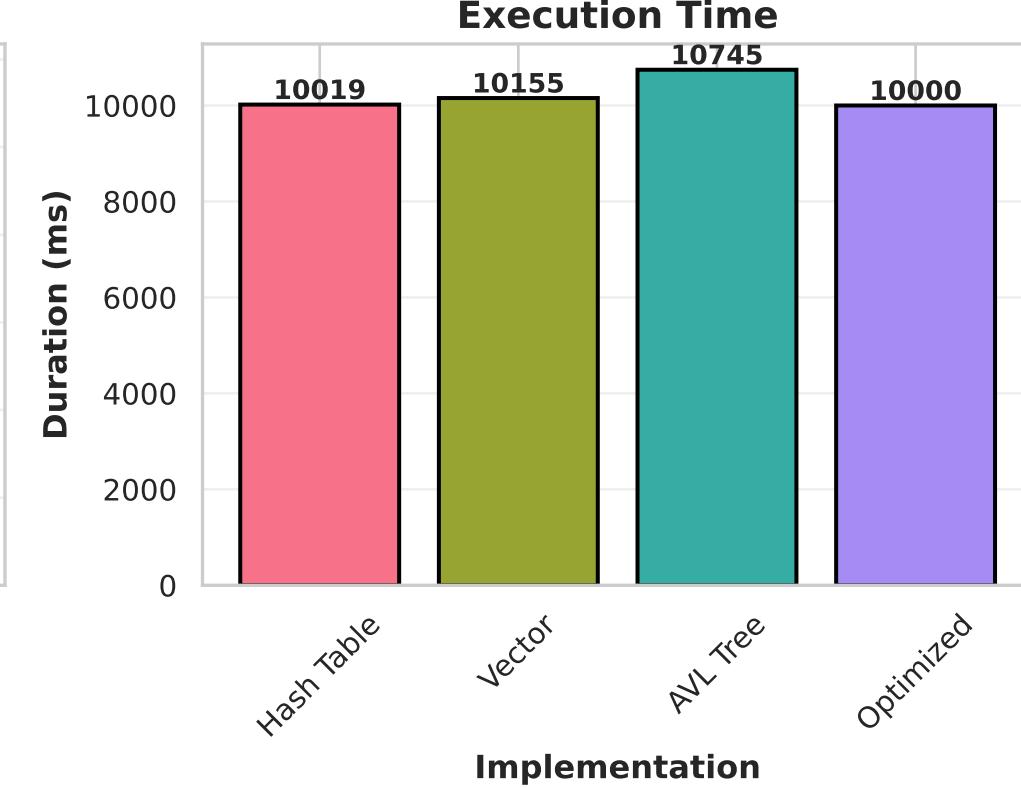
**Performance Comparison  
(Higher is Better)**



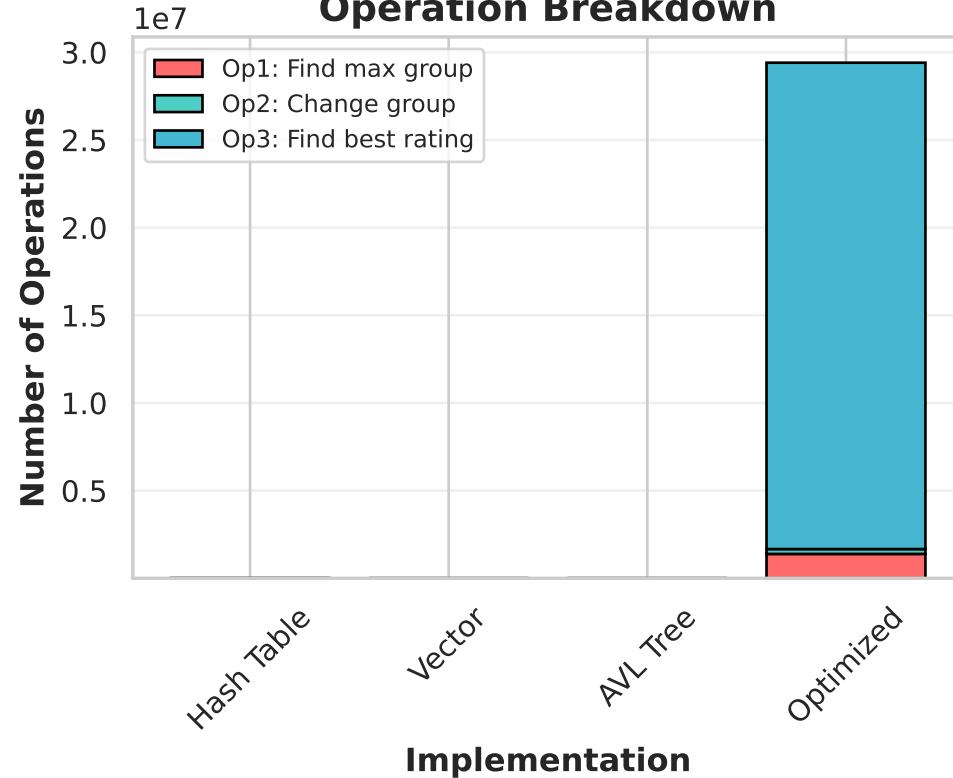
**Total Operations in 10 seconds**



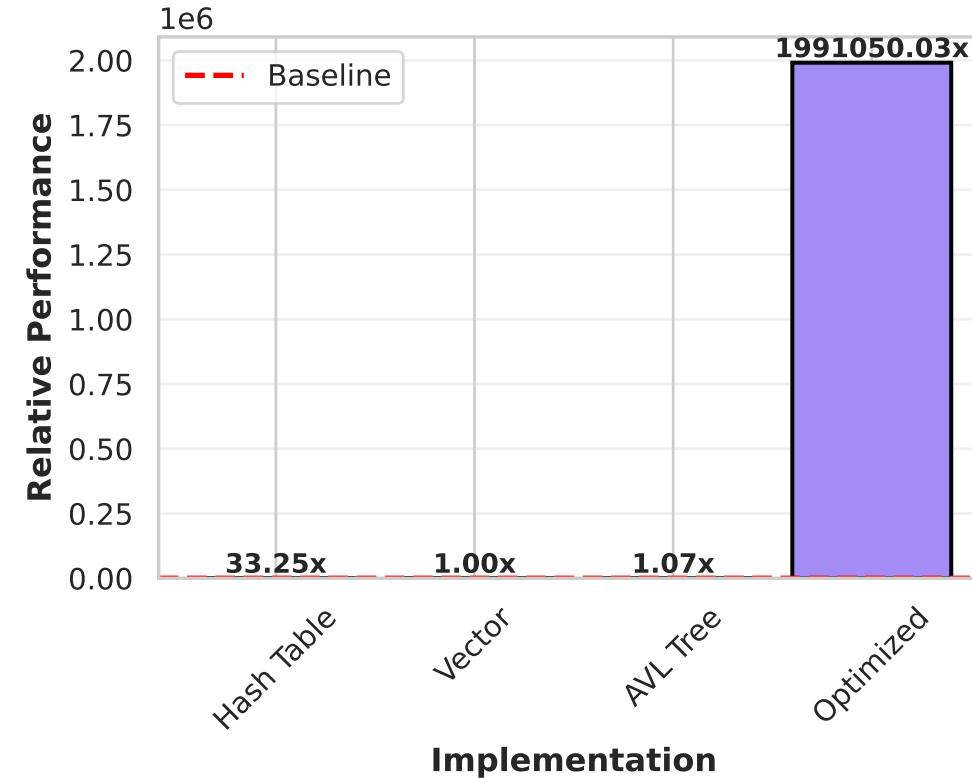
**Execution Time**



**Operation Breakdown**



**Speedup vs Slowest Implementation**



**Performance Summary**

Implementation	Ops/sec	Total Ops	Duration
Hash Table	49	492	10,019 ms
Vector	1	15	10,155 ms
AVL Tree	2	17	10,745 ms
Optimized	2,940,980	29,409,782	10,000 ms