ALGORITHM ANALYSIS / Grant Lanham

ALGORITHM ANALYSIS									
Elements	Insert Sort (Th)	Insert Sort (Exp)	Insert Sort Hidden Constant	Merge Sort (Th)	Merge Sort (Exp)	Merge Sort Hidden Constant	Quick Sort (Th)	Quick Sort (Exp)	Quick Sort Hidden Constant
5000	2.5E+07	0.394	1.576E-08	61438.6	0.364	5.92462E-06	2.5E+07	0.076	3.04E-09
10000	1E+08	0.936	9.36E-09	132877	0.696	5.23792E-06	1E+08	0.15	1.5E-09
15000	2.25E+08	1.454	6.46222E-09	208090	1.082	5.19967E-06	2.25E+08	0.285	1.26667E-09
20000	4E+08	2.132	5.33E-09	285754	1.419	4.96581E-06	4E+08	0.363	9.075E-10
25000	6.25E+08	2.889	4.6224E-09	365241	1.796	4.9173E-06	6.25E+08	0.478	7.648E-10
30000	9E+08	3.616	4.01778E-09	446180	2.335	5.23331E-06	9E+08	0.62	6.88889E-10
35000	1.225E+09	3.939	3.21551E-09	528327	2.799	5.29785E-06	1.225E+09	0.743	6.06531E-10
40000	1.6E+09	4.617	2.88563E-09	611508	2.853	4.66551E-06	1.6E+09	0.926	5.7875E-10
45000	2.025E+09	6.519	3.21926E-09	695594	3.339	4.80022E-06	2.025E+09	1.184	5.84691E-10
50000	-1.79497E+09	6.067	-3.38001E-09	780482	4.864	6.23205E-06	-1.79497E+09	1.38	-7.68816E-10
55000	-1.26997E+09	6.407	-5.04501E-09	866093	4.111	4.7466E-06	-1.26997E+09	1.492	-1.17483E-09
60000	-6.94967E+08	6.944	-9.99184E-09	952360	4.518	4.744E-06	-6.94967E+08	1.534	-2.2073E-09
65000	-6.99673E+07	7.773	-1.11095E-07	1.03923E+06	4.729	4.55049E-06	-6.99673E+07	1.904	-2.72127E-08
70000	6.05033E+08	7.85	1.29745E-08	1.12665E+06	4.937	4.382E-06	6.05033E+08	2.112	3.49072E-09
75000	1.33003E+09	8.785	6.6051E-09	1.2146E+06	6.096	5.01896E-06	1.33003E+09	2.317	1.74206E-09
80000	2.10503E+09	9.135	4.3396E-09	1.30302E+06	5.697	4.37216E-06	2.10503E+09	2.363	1.12255E-09
85000	-1.36493E+09	9.555	-7.00034E-09	1.39189E+06	6.064	4.35667E-06	-1.36493E+09	2.596	-1.90192E-09
90000	-4.89935E+08	10.261	-2.09436E-08	1.48119E+06	6.345	4.28373E-06	-4.89935E+08	3.02	-6.16409E-09
95000	4.35065E+08	10.919	2.50974E-08	1.57089E+06	6.647	4.23137E-06	4.35065E+08	3.314	7.61725E-09
100000	1.41007E+09	11.262	7.98686E-09	1.66096E+06	7.006	4.21803E-06	1.41007E+09	3.082	2.18571E-09

