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In milliseconds						
Sort & Input		Sorted Linked List		Unsorted Link List	Reverse Sorted Linked List	
INSERTION SORT	10	O(n^2)	0.4525	0.4275	O(n^2)	0.4617
	50	O(n^2)	3.1210	2.4426	O(n^2)	4.4924
	100	O(n^2)	5.5808	2.9011	O(n^2)	8.9085
	150	O(n^2)	25.0601	2.7991	O(n^2)	15.4085
	300	O(n^2)	40.2312	8.3785	O(n^2)	30.6725
	500	O(n^2)	96.4735	19.8064	O(n^2)	132.6228
	1000	O(n^2)	600.7415	39.4368	O(n^2)	899.4495
	1500	O(n^2)	1786.7954	45.99	O(n^2)	3106.3752
QUICK SORT	10	O (n log n)	0.5484	0.4275	O (n log n)	0.4279
	50	O (n log n)	2.3617	2.4426	O (n log n)	1.9105
	100	O (n log n)	6.1316	2.9011	O(n^2)	5.2363
	150	O (n log n)	6.7942	2.7991	O(n^2)	11.1396
	300	O (n log n)	10.6234	8.3785	O(n^2)	43.1763
	500	O (n log n)	13.9482	19.8064	O(n^2)	104.2922
	1000	O (n log n)	41.9011	39.4368	O(n^2)	418.9515
	1500	O (n log n)	117.0809	45.99	O(n^2)	989.8256
MERGE SORT	10	O (n log n)	0.5539	0.4275	O (n log n)	0.5011
	50	O (n log n)	2.3021	2.4426	O (n log n)	1.4766
	100	O (n log n)	3.7749	2.9011	O (n log n)	1.8214
	150	O (n log n)	4.0015	2.7991	O (n log n)	2.4043
	300	O (n log n)	5.7053	8.3785	O (n log n)	3.3971
	500	O (n log n)	8.2523	19.8064	O (n log n)	5.9774
	1000	O (n log n)	23.7634	39.4368	O (n log n)	15.2673
	1500	O (n log n)	34.8625	45.99	O (n log n)	25.9606

Datasets	O (n)	O (n log n)	O (n^2)
10	10	10	100
50	50	84.4985	2500
100	100	200	10000
150	150	326.414	22500
300	300	743.136	90000
500	500	1349.49	250000
1000	1000	3000	1000000
1500	1500	4764.14	2250000

	Best Case	Worst Case
Insertion Sort	O(n^2)	O(n^2)
Quick Sort	O(n log n)	O(n^2)
Merge Sort	O(n log n)	O(n log n)

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Ascending Order (Best case scenario)

Number of Datasets (y-axis: 0 to 2000)
Run Time in Milliseconds (x-axis: 0 to 1600)

Legend:
- Insertion Sort O(n^2)
- Quick Sort O(n logn)
- Merge Sort O(n logn)

Descending Order (Worst case scenario)

Number of Datasets (y-axis: 0 to 3500)
Run Time in Milliseconds (x-axis: 0 to 1600)

Legend:
- Insertion Sort O(n^2)
- Quick Sort O(n^2)
- Merge Sort O(n logn)