OFFLINE-1

Fixed: Range of the elements 1~100 Variable: Array Length

Array Length		Time			Swap		Comparisons			
1,000	0.009	0.004	0.006	246032	247032	984	499500	248032	499500	
5,000	0.094	0.019	0.034	6184634	6189634	4944	12497500	6194634	12497500	
10,000	0.32	0.077	0.132	24795166	24814141	9897	49995000	24824141	49995000	
50,000	7.985	1.879	3.232	621008798	620184376	49481	1249975000	620234376	124997500	
1,00,000	32.452	7.594	13.01	2472290990	2471960552	99022	4999950000	2472060552	4999950000	
5,00,000	770.763	181.175	301.336	61819252343	61839207270	495037	124999750000	61876684989	124999750000	
	Bubble	Insertion	Selection	Bubble	Insertion	Selection	Bubble	Insertion	Selection	

OFFLINE-2

Fixed: Length of the Array 1000 Variable: Array Element Density

Element Range	Time				Swap		Comparisons		
1~100	0.009	0.003	0.006	245652	246651	981	499500	246651	499500
1~500	0.009	0.003	0.006	253804	253804	992	499500	247430	499500
1~1,000	0.009	0.003	0.006	254062	254062	989	499500	255061	499500
1~5,000	0.009	0.003	0.006	252625	252625	989	499500	253624	499500
1~10,000	0.009	0.003	0.006	251159	251159	993	499500	252158	499500
1~50,000	0.009	0.003	0.006	252707	252707	989	499500	253706	499500
	Bubble	Insertion	Selection	Bubble	Insertion	Selection	Bubble	Insertion	Selection