

OFFLINE-1

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

Array Length	Time			Swap			Comparisons		
1,000	0.006688	0.002482	0.003317	243606	247921	977	499500	247921	499500
5,000	0.081418	0.038304	0.051630	6211265	6234813	4939	12497500	6234813	12497500
10,000	0.239094	0.104837	0.139845	24818458	24448692	9901	49995000	24448692	49995000
50,000	6.048197	1.940693	2.888059	621913279	618605178	49479	1249975000	618605178	1249975000
1,00,000	25.931289	12.351442	11.169447	2473679521	2478086868	98959	4999950000	2478086868	4999950000
5,00,000	717.121355	267.369978	279.074271	61895827360	61866395990	495051	124999750000	61866395990	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	0.006881	0.002279	0.003314	255339	246513	983	499500	246513	499500
1~500	0.006898	0.002497	0.003489	250666	253165	993	499500	253165	499500
1~1,000	0.006850	0.002606	0.003851	248022	245614	989	499500	245614	499500
1~5,000	0.006805	0.002555	0.003414	252558	246271	994	499500	246271	499500
1~10,000	0.006594	0.002604	0.003489	253891	255557	993	499500	255557	499500
1~50,000	0.006524	0.002488	0.003380	248402	254587	994	499500	254587	499500
	Bubble	Insertion	Selection	Bubble	Insertion	Selection	Bubble	Insertion	Selection