

OFFLINE-1

Fixed: Range of the elements 1~100

Variable: Array Length

<i>Array Length</i>	Time			Swap			Comparisons		
1,000	0.002125 sec	0.000653	0.001216	257489	248054	984	499500	247055	499500
5,000	0.042929 sec	0.018641	0.019831	6199500	6195531	4939	12497500	6190532	12497500
10,000	0.170671 sec	0.068541	0.115469	225008948	24922485	9892	49995000	24912486	49995000
50,000	5.27509 sec	1.66802	2.08103	620119830	617900929	49438	1249975000	617850930	1249975000
1,00,000	28.7498 sec	4.65422	11.0842	2477736493	2468759394	99012	4999950000	2468659395	4999950000
5,00,000	1012.3 sec	119.79	224.052	1700003353	61927697678	495049	445698416	61928197677	124999750000
	Bubble	Insertion	Selection	Bubble	Insertion	Selection	Bubble	Insertion	Selection

OFFLINE-2

Fixed: Length of the Array 1000

Variable: Array Element Density

<i>Element Range</i>	Time			Swap			Comparisons		
1~100	0.002451	0.000682	0.001219	245046	246313	985	499500	245314	499500
1~500	0.001811	0.000778	0.001101	256923	247667	993	499500	246668	499500
1~1,000	0.001785	0.000689	0.001301	239706	246473	991	499500	245474	499500
1~5,000	0.002127	0.000937	0.001065	241084	242330	996	499500	241331	499500
1~10,000	0.001532	0.000757	0.000935	244554	249544	989	499500	248545	499500
1~50,000	0.00194	0.000847	0.000941	256883	251177	990	499500	250178	499500
	Bubble	Insertion	Selection	Bubble	Insertion	Selection	Bubble	Insertion	Selection