

Thomas Chin
11/7/17
tchin006
Harry Chasparis

Array Size	Bubble Sort $O(n^2)$	Insertion Sort $O(n^2)$	Selection Sort $O(n^2)$	Shell Sort 1 $O(n^{3/2})$	Shell Sort 2 $O(n^{3/2})$
1	0	0	0	0	
2	0	0	0	0	
4	0	0	0	0	
8	0	0	0	0	
16	0	0	0	0	
32	0	0	0	0	
64	0	0	0	0	
128	0	0	0	0	
256	0.015625	0	0	0	
512	0	0	0.015625	0	
1024	0.015625	0.015625	0.015625	0.015625	
2048	0.140625	0.0625	0.109375	0	
4096	0.65625	0.25	0.234375	0.015625	
8192	2.07812	1.07812	1.5625	0.03125	
16384	10.6719	3.6875	4.26562	0.078125	
32768	37.3906	16.9062	21.25	0.265625	
65536	157.234	54.6094	90.7344	0.875	

The more inefficient the Big-Oh, the longer the running time is as the number of elements get substantially bigger.

