NOTE:
Number List sizes had to be reduced to 100000 in order for the data to be collected in a timely manner. This was due to my computer having a slower processor.

BubbleSort Analysis Tables

Trial 1					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	22	186	33075
Swaps	20	2534	252360	24576245	2463898384
Comparisons	45	4950	499500	49995000	4999950000

Trial 2					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	1	25	224	31036
Swaps	16	2575	24745920	4745920	2470485380
Comparisons	45	4950	499500	49995000	4999950000

Trial 3					
Number List Size	10	100	1000	10000	100000
Miliseconds	2	1	69	462	56051
Swaps	29	2217	251647	24857018	2478976078
Comparisons	45	4950	499500	49995000	4999950000

Trial 4					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	109	843	76640
Swaps	14	2553	253151	24795077	2475410164
Comparisons	45	4950	499500	49995000	4999950000

Trial 5					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	64	444	76659
Swaps	13	2459	248725	24906899	2475256811
Comparisons	45	4950	499500	49995000	4999950000

Trial 6					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	22	167	30005
Swaps	18	2218	247729	24419431	2461791067
Comparisons	45	4950	499500	49995000	4999950000

Trial 7					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	0	22	244	37623
Swaps	31	2476	243002	24736817	2468310878
Comparisons	45	4950	499500	49995000	4999950000

Trial 8					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	2	58	402	55393
Swaps	20	2737	243212	24897093	2470770240
Comparisons	45	4950	499500	49995000	4999950000

Trial 9					
Number List Size	10	100	1000	10000	100000
Miliseconds	17	0	53	400	82078
Swaps	28	2308	250239	24633668	2464579009
Comparisons	45	4950	499500	49995000	4999950000

Trial 10					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	3	36	553	79500
Swaps	22	2577	253228	24911569	2473067558
Comparisons	45	4950	499500	49995000	4999950000

Trial 2					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	1	25	224	31036
Swaps	16	2575	24745920	4745920	2470485380
Comparisons	45	4950	499500	49995000	4999950000

Miliseconds Taken Based On List Size

SelectionSort Analysis Tables

Trial 1					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	15	431	45644
Swaps	7	322	5411	77625	1014776
Comparisons	45	4950	499500	49995000	4999950000

Trial 2					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	16	393	42860
Swaps	9	304	5754	78182	1007486
Comparisons	45	4950	499500	49995000	4999950000

Trial 3					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	3	47	348	30688
Swaps	15	319	5475	76733	1020942
Comparisons	45	4950	499500	49995000	4999950000

Trial 4					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	8	50	474	95739
Swaps	11	347	5545	77809	1013117
Comparisons	45	4950	499500	49995000	4999950000

Trial 5					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	1	32	501	92559
Swaps	10	333	5402	79104	988680
Comparisons	45	4950	499500	49995000	4999950000

Trial 6					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	0	17	383	40043
Swaps	12	313	5519	78976	1018238
Comparisons	45	4950	499500	49995000	4999950000

Trial 7					
Number List Size	10	100	1000	10000	100000
Miliseconds	2	2	20	360	53114
Swaps	13	330	5296	76027	1000947
Comparisons	45	4950	499500	49995000	4999950000

Trial 8					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	29	532	67579
Swaps	10	372	5325	79383	1004661
Comparisons	45	4950	499500	49995000	4999950000

Trial 9					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	1	49	838	103077
Swaps	13	334	5208	76947	999573
Comparisons	45	4950	499500	49995000	4999950000

Trial 10					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	3	59	411	56701
Swaps	13	313	5252	76750	1008678
Comparisons	45	4950	499500	49995000	4999950000

Trial 6					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	0	17	383	40043
Swaps	12	313	5519	78976	1018238
Comparisons	45	4950	499500	49995000	4999950000

Miliseconds Taken Based On List Size

Insertion Sort Analysis Tables

Trial 1					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	11	412	8782
Swaps	20	2535	252360	24576245	2463898384
Comparisons	9	99	999	9999	99999

Trial 2					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	17	638	43619
Swaps	16	2575	24745920	4745920	2470485380
Comparisons	9	99	999	9999	99999

Trial 3					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	2	68	913	19219
Swaps	29	2217	251647	24857018	2478976078
Comparisons	9	99	999	9999	99999

Trial 4					
Number List Size	10	100	1000	10000	100000
Miliseconds	2	0	56	803	22949
Swaps	14	2553	253151	24795077	2475410164
Comparisons	9	99	999	9999	99999

Trial 5					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	0	66	861	22543
Swaps	13	2459	248725	24906899	2475256811
Comparisons	9	99	999	9999	99999

Trial 6					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	1	12	403	37163
Swaps	18	2218	247729	24419431	2461791067
Comparisons	9	99	999	9999	99999

Trial 7					
Number List Size	10	100	1000	10000	100000
Miliseconds	3	0	22	719	16625
Swaps	31	2476	243002	24736817	2468310878
Comparisons	9	99	999	9999	99999

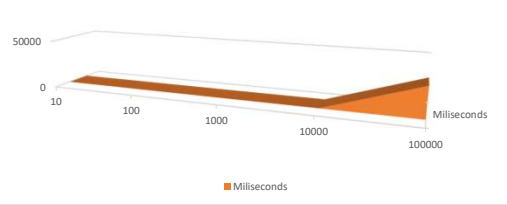
Trial 8					
Number List Size	10	100	1000	10000	100000
Miliseconds	2	0	51	1099	22048
Swaps	20	2737	243212	24897093	2470770240
Comparisons	9	99	999	9999	99999

Trial 9					
Number List Size	10	100	1000	10000	100000
Miliseconds	0	0	55	863	25543
Swaps	28	2308	250239	24633668	2464579009
Comparisons	9	99	999	9999	99999

Trial 10					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	63	1066	126680
Swaps	22	2577	253228	24911569	2473067558
Comparisons	9	99	999	9999	99999

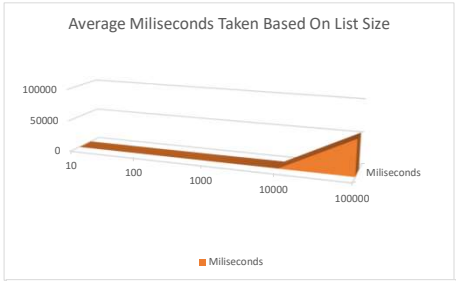
Trial 1					
Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	11	412	8782
Swaps	20	2535	252360	24576245	2463898384
Comparisons	9	99	999	9999	99999

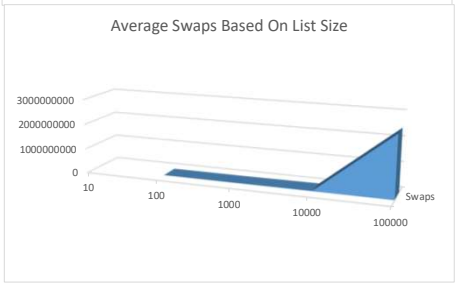
Miliseconds Taken Based On List Size

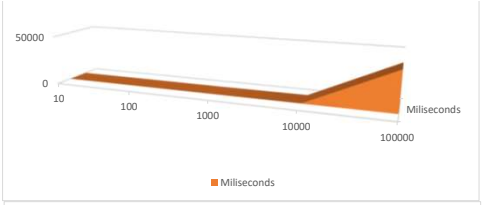


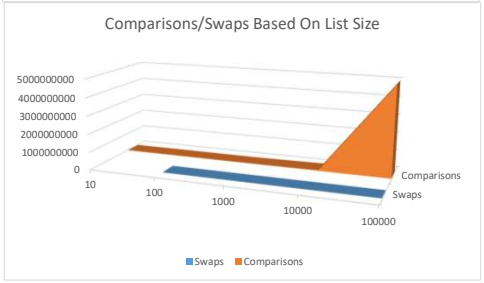
AVERAGE

Number List Size	10	100	1000	10000	100000
Miliseconds	2	1	48	393	55806
Swaps	21	2465	2698921	22747974	2470254557



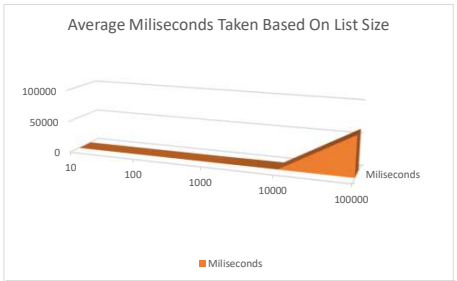


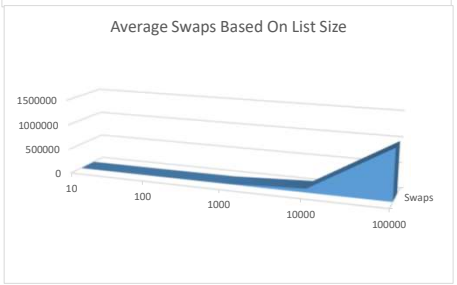


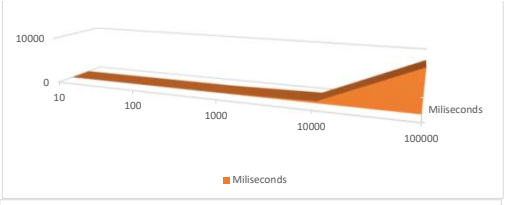


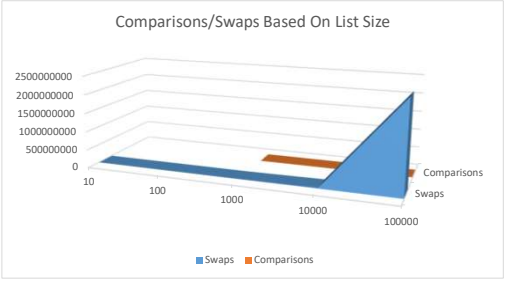
AVERAGE

Number List Size	10	100	1000	10000	100000
Miliseconds	1	2	33	467	62800
Swaps	11	329	5419	77754	1007710



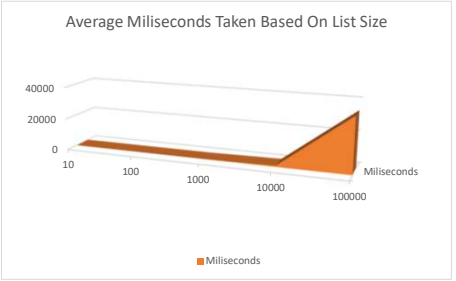


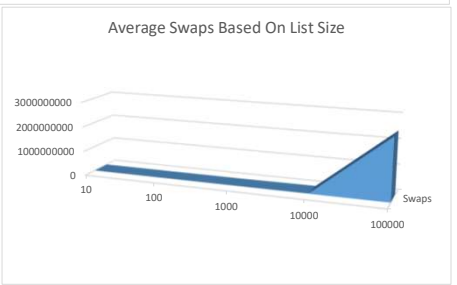




AVERAGE

Number List Size	10	100	1000	10000	100000
Miliseconds	1	0	42	778	34517
Swaps	21	2466	2698921	22747974	2470254557





ANALYSIS:

Based on the data so far, the most efficient sorting program seems to be SelectionSort which on average has lower times and swap numbers. I think there's something with the way the algorithm is written but for some reason the BubbleSort and the InsertionSort keep coming back with the same number of swaps. So their averages were exactly the same. However, ImersionSort beats both algorithms on comparison efficiency, having the lower of