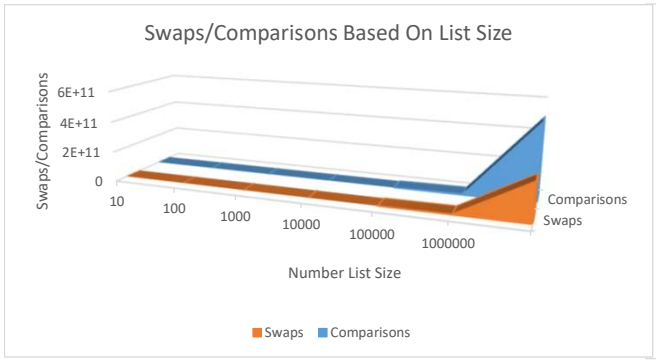
BubbleSort Analysis Sheet

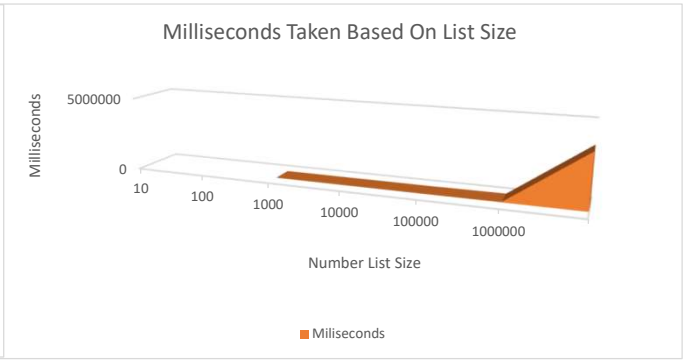
Number List Size	10	100	1000	10000	100000	1000000
Miliseconds	0	0	27	312	30720	3430563
Swaps	24	2765	246734	25026299	2481035035	247375710056
Comparisons	45	4950	499500	49995000	4999950000	499999500000

Modified BubbleSort Analysis Sheet

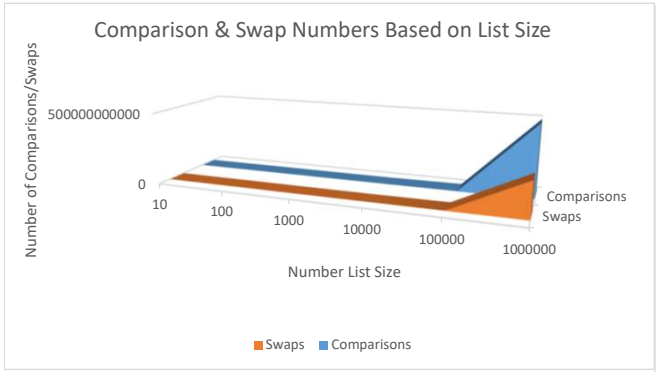
Number List Size	10	100	1000	10000	100000	1000000
Miliseconds	1	1	24	362	29499	3620412
Swaps	24	2765	246734	25026299	2481035035	247375710056
Comparisons	44	4935	498275	49980122	4999889622	499997960865

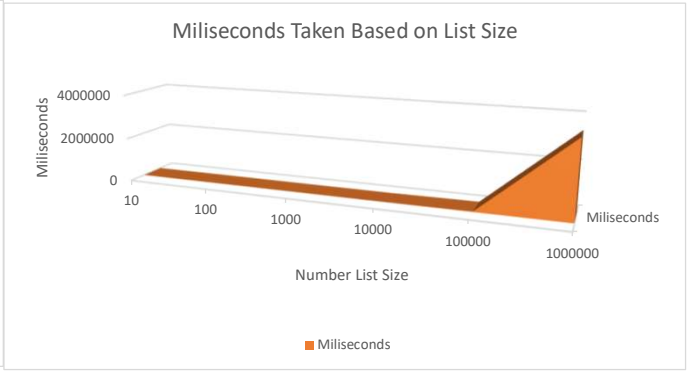
Modified Graphs:





Original Graphs:





Analysis:
For the ModifiedBubbleSort I added a boolean feature that would skip checking over already placed numbers. Based on the data, there seems to be an overall increase in time taken but a decrease in comparisons. The swap numbers stayed the same. The times fluctuate between being faster and slower (with the times at 1000 and 100000 being faster). It's unsurprising that the swaps stayed the same, since it's the same number lists with the same amounts. The good news is that overall the comparison numbers were lower. So if this program was run on a computer with a higher processing power, I feel it may run much faster and the times may be better than what I got. It's definitely an improvement to the algorithm.