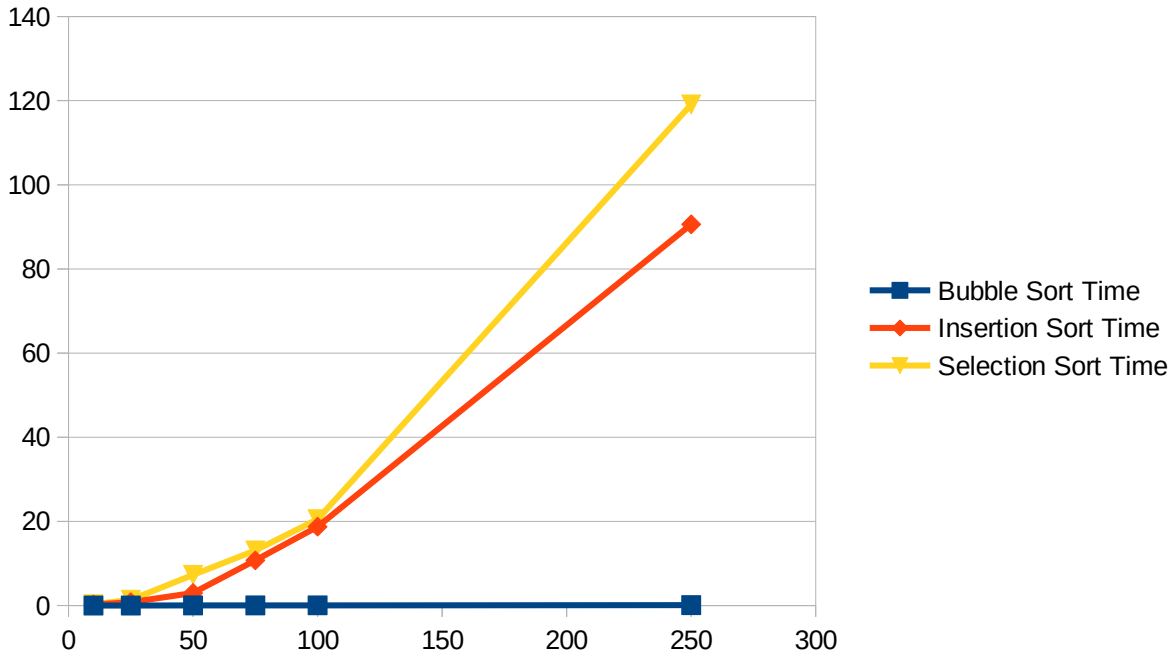
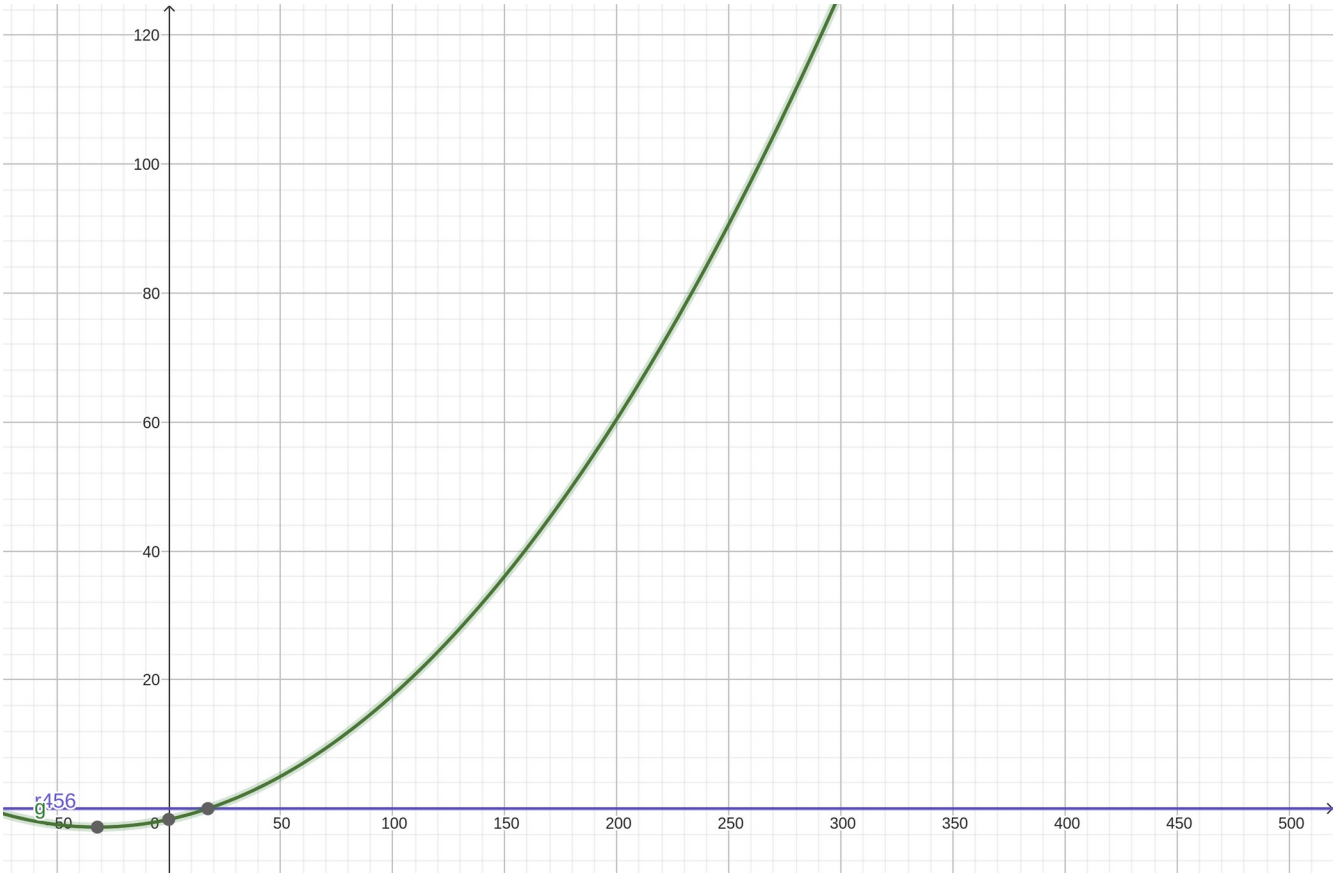


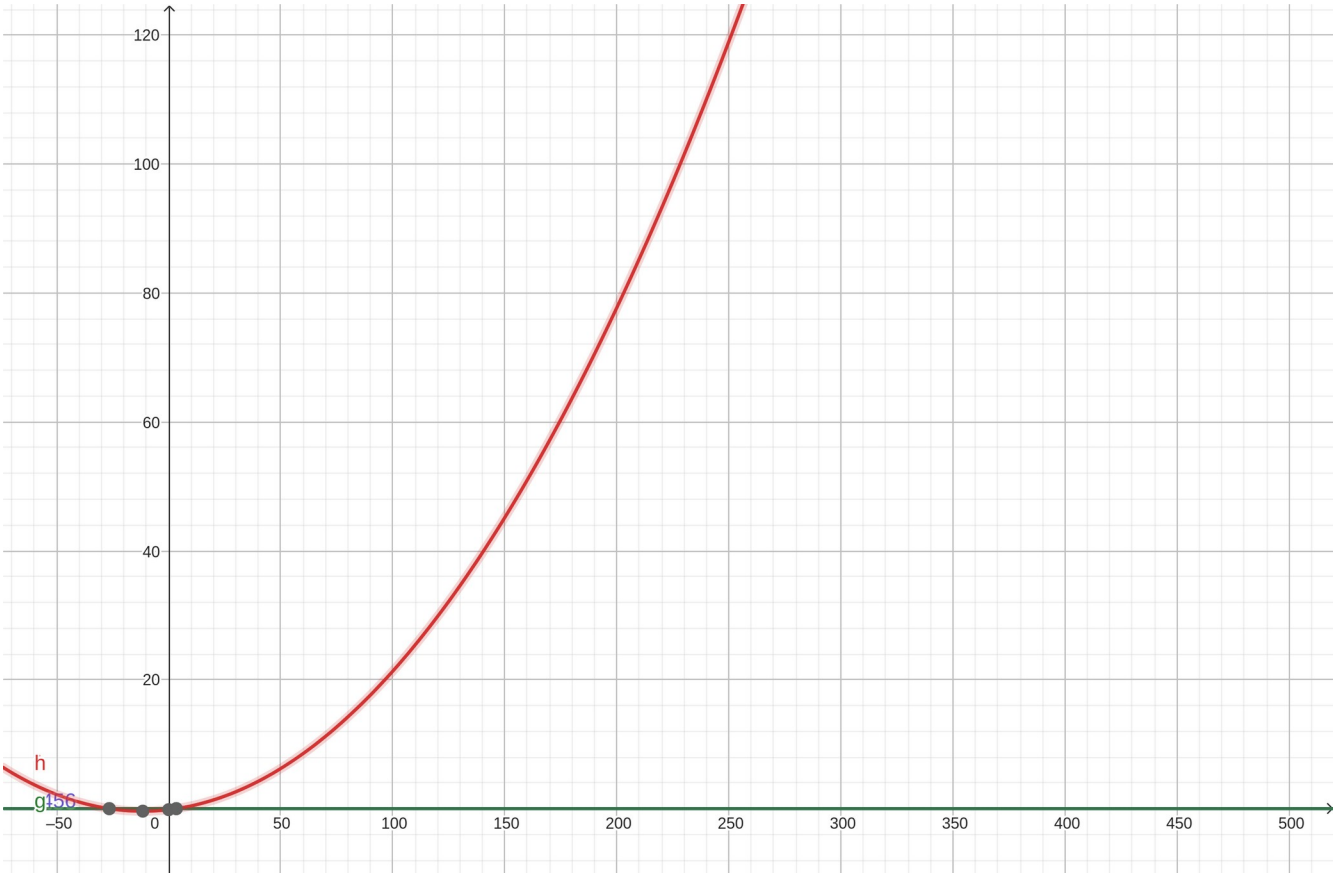
Array Size (In Thousands)	Bubble Sort Time	Insertion Sort Time	Selection Sort Time
10	0.00163263	0.225613	0.3
25	0.00438494	0.801347	1.36127
50	0.0185548	2.96708	7.29014
75	0.0261812	10.735	13.0974
100	0.0370356	18.7339	20.5055
250	0.102815	90.5998	119.09
500	0.215998		
1000	0.45632		
5000	1.50057		
25000	7.30129		
100000	31.3259		
250000	122.534		

Bubble - 0.0000001371078x^(2) + 0.0003898563157x - 0.0032303118798 * 1

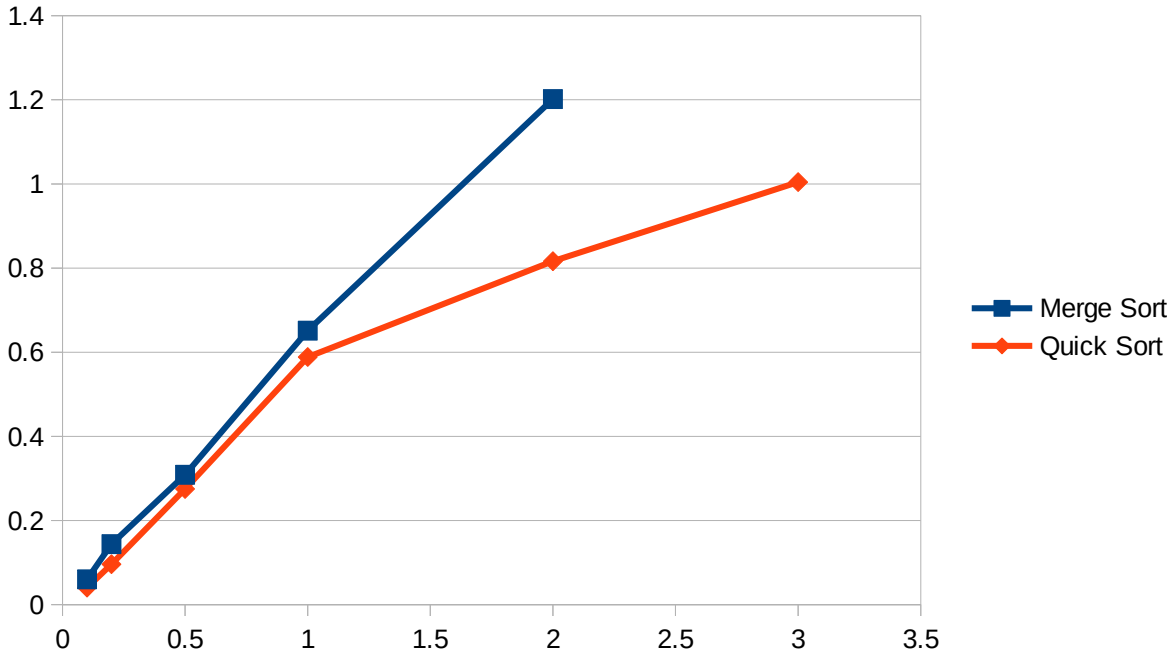
Insertion - 0.0011780931078x^(2) + 0.0750089957539x - 1.6716203591247 * 1



Selection - 0.0017455267799x^(2) + 0.0403689906496x - 0.1570797964468 * 1



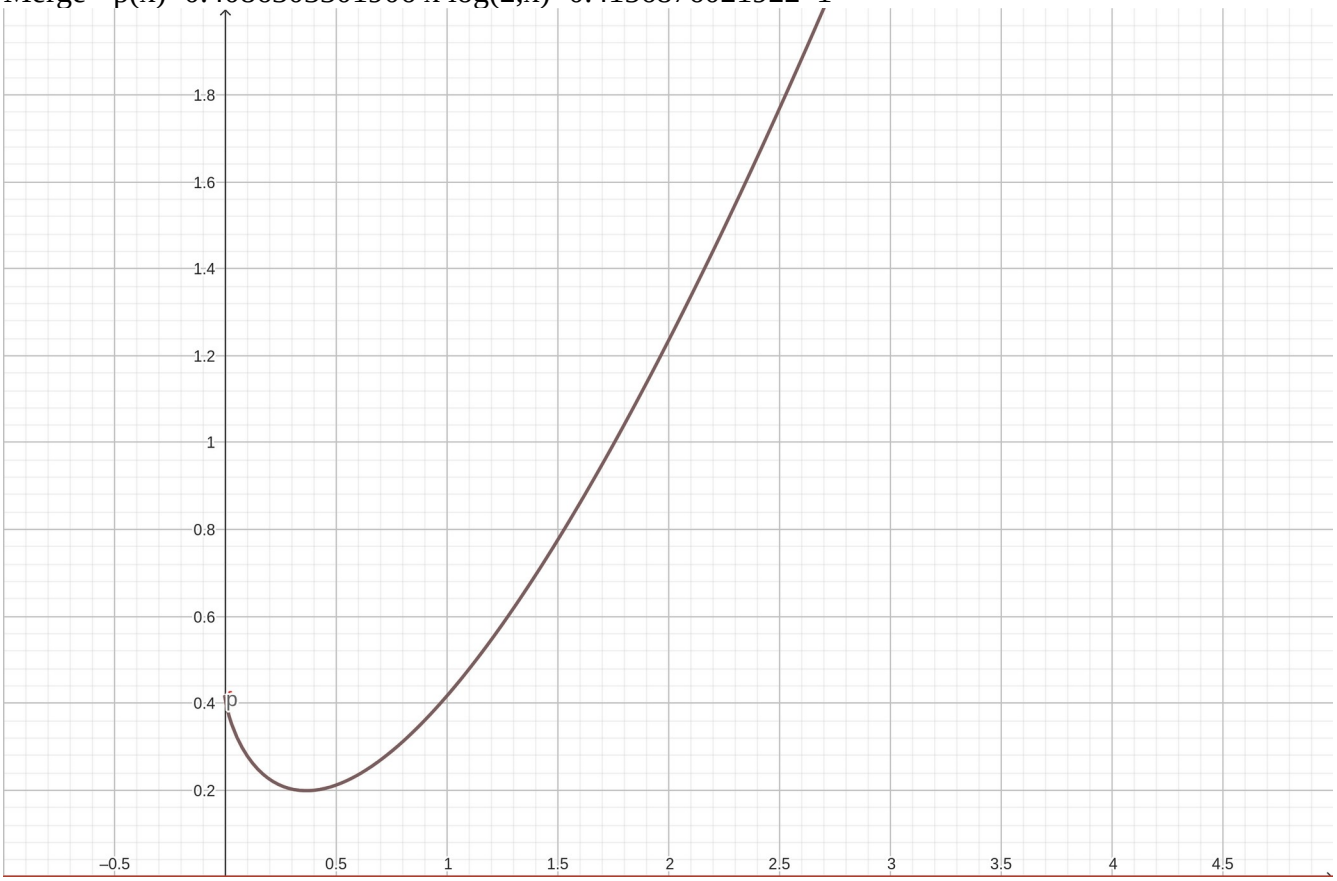
h



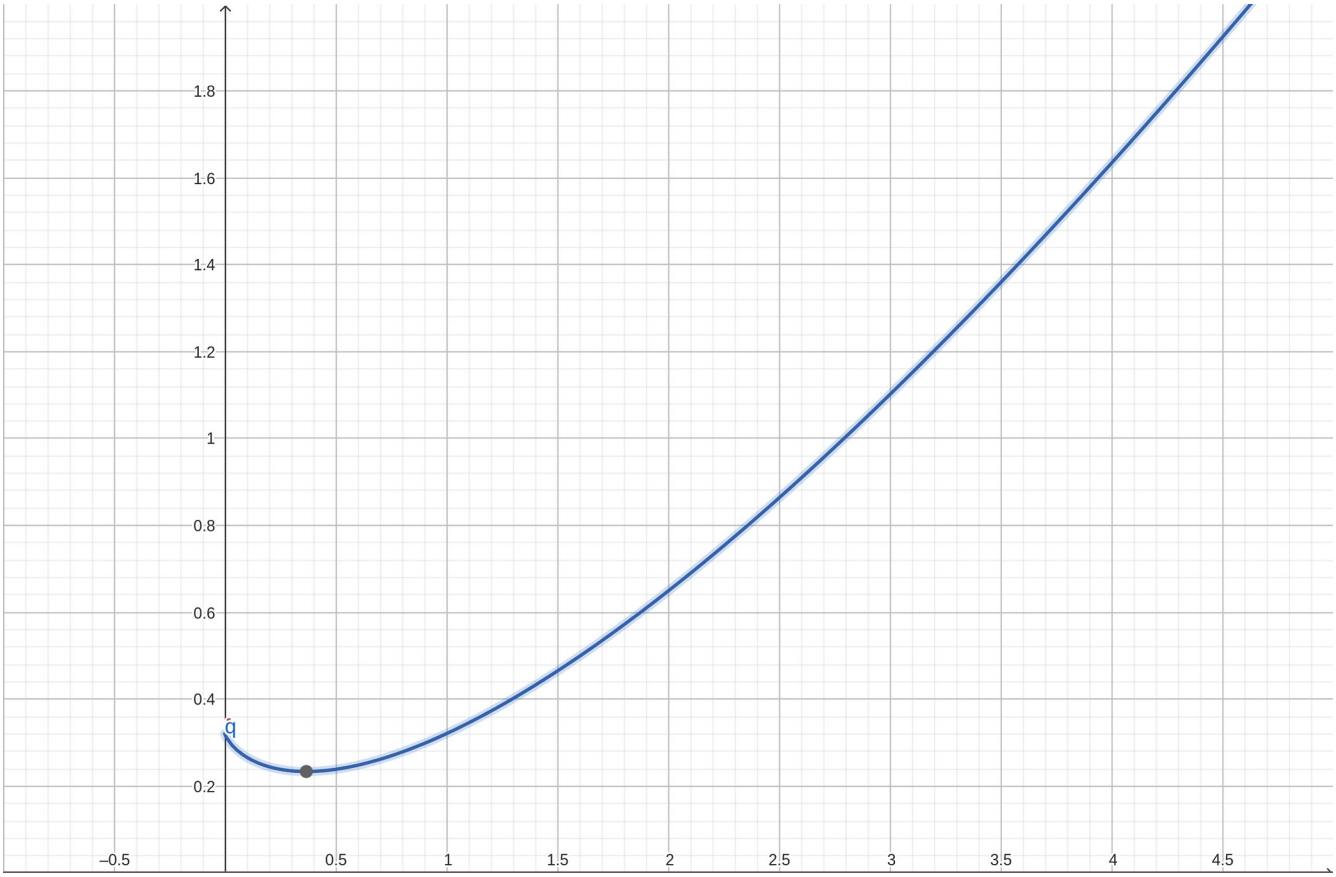
Array Size In Millions	Merge Sort	Quick Sort
0.1	0.0602754	0.0404116
0.2	0.143918	0.0961964
0.5	0.30865	0.275071
1	0.651294	0.588648
2	1.20174	0.816361
3		1.00438

At 3mil, merge sort gives a segmentation fault error

Merge - p(x)=0.4086303301906 x log(2,x)+0.4156876021922*1



Quick - 0.1641097700031x log(2, x) + 0.320884358885 * 1


1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
q
–0.5
0.5
1
1.5
2
2.5
3
3.5
4
4.5