r^0	Size(n)	r^2	Bubble sort operations	Selection sort operations	f(n) Big0(n^2)		fit f(n)		+Delta Above	
					cb2	cs2	bubble	selection	bubble	selection
1	100	10000	23645	11044	29881	10006	38071	10433	-8190	-427
1	200	40000	121881	42316	119524	40024	117592	42034	1932	-2010
1	300	90000	248861	93766	268929	90054	256875	93646	12054	-3592
1	400	160000	455733	165080	478096	160096	455920	165271	22176	-5175
1	500	250000	706353	257072	747025	250150	714727	256907	32298	-6757
1	600	360000	1005549	368326	1075716	360216	1033296	368556	42420	-8340
1	700	490000	1375797	500036	1464169	490294	1411627	500216	52542	-9922
1	800	640000	1885137	651922	1912384	640384	1849720	651889	62664	-11505
1	900	810000	2390989	823570	2420361	810486	2347575	823573	72786	-13087
1	1000	1000000	2991209	1014554	2988100	1000600	2905192	1015270	82908	-14670
1	1100	1210000	3529201	1226606	3615601	1210726	3522571	1226978	93030	-16252
1	1200	1440000	4225133	1458354	4302864	1440864	4199712	1458699	103152	-17835
1	1300	1690000	4838077	1710298	5049889	1691014	4936615	1710431	113274	-19417
1	1400	1960000	5730461	1981514	5856676	1961176	5733280	1982176	123396	-21000
1	1500	2250000	6611789	2273598	6723225	2251350	6589707	2273932	133518	-22582
1	1600	2560000	7536261	2586256	7649536	2561536	7505896	2585701	143640	-24165
1	1700	2890000	8425037	2916992	8635609	2891734	8481847	2917481	153762	-25747
1	1800	3240000	9521865	3269230	9681444	3241944	9517560	3269274	163884	-27330
1	1900	3610000	10482049	3641086	10787041	3612166	10613035	3641078	174006	-28912
1	2000	4000000	11754925	4032730	11952400	4002400	11768272	4032895	184128	-30495
1	2100	4410000	12999633	4444476	13177521	4412646	12983271	4444723	194250	-32077
1	2200	4840000	14471705	4877904	14462404	4842904	14258032	4876564	204372	-33660
1	2300	5290000	15329961	5327992	15807049	5293174	15592555	5328416	214494	-35242
1	2400	5760000	17334077	5799902	17211456	5763456	16986840	5800281	224616	-36825
1	2500	6250000	18544845	6292668	18675625	6253750	18440887	6292157	234738	-38407
1	2600	6760000	19792793	6804638	20199556	6764056	19954696	6804046	244860	-39990
1	2700	7290000	21539693	7336342	21783249	7294374	21528267	7335946	254982	-41572
1	2800	7840000	23166929	7887154	23426704	7844704	23161600	7887859	265104	-43155
1	2900	8410000	24474121	8460846	25129921	8415046	24854695	8459783	275226	-44737
1	3000	9000000	26612577	9050892	26892900	9005400	26607552	9051720	285348	-46320
1	3100	9610000	28762669	9663336	28715641	9615766	28420171	9663668	295470	-47902
1	3200	10240000	30538757	10295374	30598144	10246144	30292552	10295629	305592	-49485
1	3300	10890000	32105553	10947702	32540409	10896534	32224695	10947601	315714	-51067
1	3400	11560000	33797925	11618008	34542436	11566936	34216600	11619586	325836	-52650
1	3500	12250000	36470725	12311568	36604225	12257350	36268267	12311582	335958	-54232
1	3600	12960000	38071505	13022436	38725776	12967776	38379696	13023591	346080	-55815
1	3700	13690000	40776193	13755320	40907089	13698214	40550887	13755611	356202	-57397
1	3800	14440000	43091981	14507986	43148164	14448664	42781840	14507644	366324	-58980
1	3900	15210000	44609673	15278684	45449001	15219126	45072555	15279688	376446	-60562
1	4000	16000000	47656449	16071978	47809600	16009600	47423032	16071745	386568	-62145

bubble sort vs selection sort operational analysis
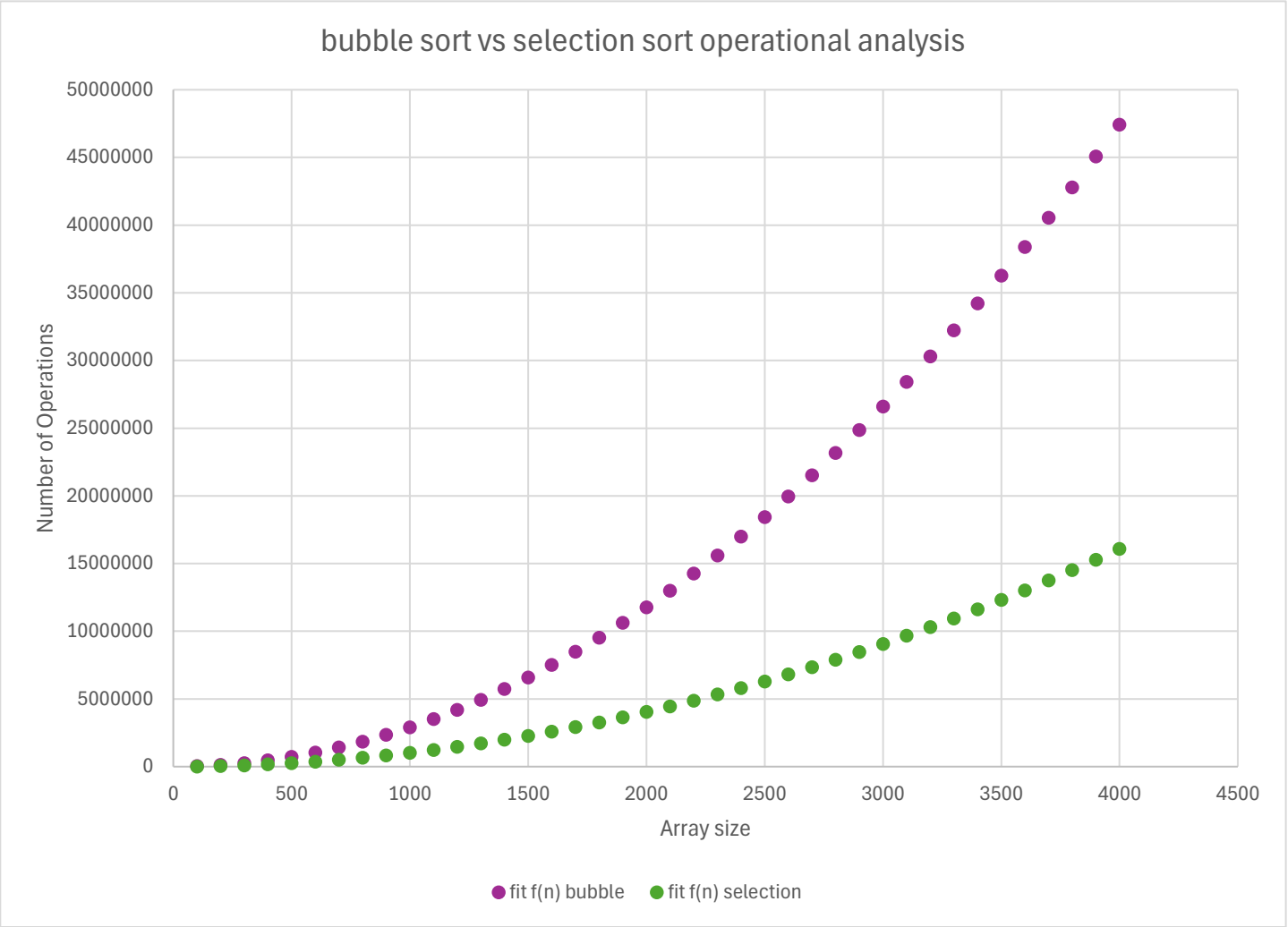
Cb0 =	18312	Cs0 =	-1155.1
cb1 =	-1.01E+02	Cs1 =	1.58E+01
Cb2 =	2.99E+00	Cs2 =	1.00E+00

$f(n) = c_0 \cdot x^0 + c_1 \cdot x^1 + c_2 \cdot x^2$

			Bubble sort	Selection sort	fit f(n)	
r^0	Size(n)	r^2	opns	opns	bubble	selection
1	100	10000	23645	11044	38071	10433
1	1500	2250000	7E+06	2273598	6589707	2273932
1	3100	9610000	3E+07	9663336	28420171	9663668
1	4000	16000000	5E+07	16071978	47423032	16071745

Both bubble sort and selection sort show quadratic growth in operation count as array size increases, confirming $O(n^2)$ complexity.