Mark Sort Analysis

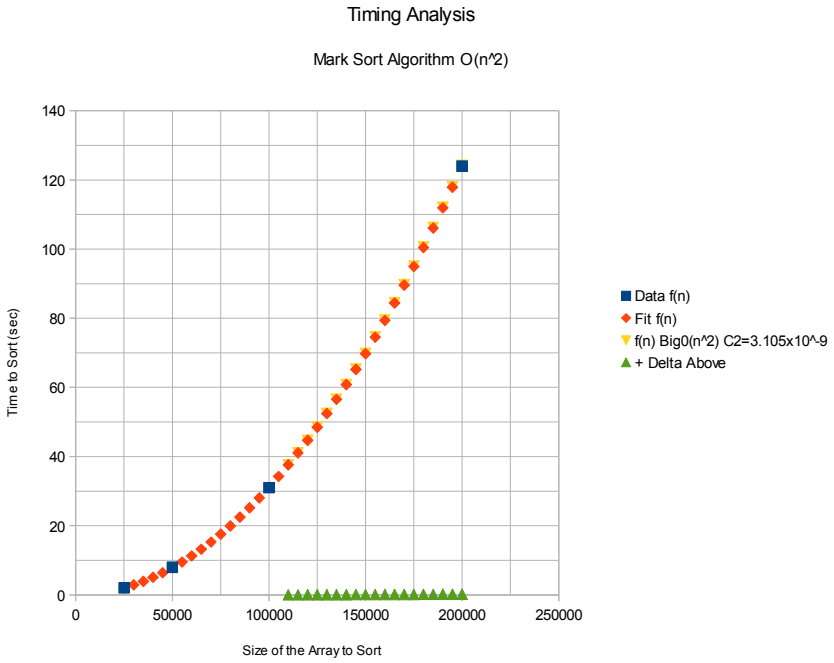
Timing Analysis

r^0	N or r^1	r^2	Data f(n)	f(n) Fit
1	25000	625000000	2	2.0774225
1	50000	2500000000	8	7.864528
1	100000	10000000000	31	31.067789
1	200000	40000000000	124	123.990511

f(n) = c0*x^0 + c1*x^1+c2*x^2
f(n) = c0*r^0 + c1*r^1+c2*r^2

0.166667	**= c0**
-1.10E-006	**= c1**
3.10E-009	**= c2**

r^0	N or r^1	r^2	f(n) Big0(n^2) C2=3.105x10^-9	Fit f(n)	+ Delta Above
1	25000	625000000	1.9406	2.07742250	-0.1367975
1	30000	900000000	2.7945	2.92473560	-0.1302356
1	35000	1225000000	3.8036	3.92710270	-0.1234777
1	40000	1600000000	4.9680	5.08452380	-0.1165238
1	45000	2025000000	6.2876	6.39699890	-0.1093739
1	50000	2500000000	7.7625	7.86452800	-0.102028
1	55000	3025000000	9.3926	9.48711110	-0.0944861
1	60000	3600000000	11.1780	11.26474820	-0.0867482
1	65000	4225000000	13.1186	13.19743930	-0.0788143
1	70000	4900000000	15.2145	15.28518440	-0.0706844
1	75000	5625000000	17.4656	17.52798350	-0.0623585
1	80000	6400000000	19.8720	19.92583660	-0.0538366
1	85000	7225000000	22.4336	22.47874370	-0.0451187
1	90000	8100000000	25.1505	25.18670480	-0.0362048
1	95000	9025000000	28.0226	28.04971990	-0.0270949
1	100000	10000000000	31.0500	31.06778900	-0.017789
1	105000	11025000000	34.2326	34.24091210	-0.0082871
1	110000	12100000000	37.5705	37.56908920	0.0014108
1	115000	13225000000	41.0636	41.05232030	0.0113047
1	120000	14400000000	44.7120	44.69060540	0.0213946
1	125000	15625000000	48.5156	48.48394450	0.0316805
1	130000	16900000000	52.4745	52.43233760	0.0421624
1	135000	18225000000	56.5886	56.53578470	0.0528403
1	140000	19600000000	60.8580	60.79428580	0.0637142
1	145000	21025000000	65.2826	65.20784090	0.0747841
1	150000	22500000000	69.8625	69.77645000	0.08605
1	155000	24025000000	74.5976	74.50011310	0.0975119
1	160000	25600000000	79.4880	79.37883020	0.1091698
1	165000	27225000000	84.5336	84.41260130	0.1210237
1	170000	28900000000	89.7345	89.60142640	0.1330736
1	175000	30625000000	95.0906	94.94530550	0.1453195
1	180000	32400000000	100.6020	100.44423860	0.1577614
1	185000	34225000000	106.2686	106.09822570	0.1703993
1	190000	36100000000	112.0905	111.90726680	0.1832332
1	195000	38025000000	118.0676	117.87136190	0.1962631
1	200000	40000000000	124.2000	123.99051100	0.209489



Mark Sort Analysis

Operational Analysis

R^0	N or r^1	R^2	Data f(n)	f(n) Fit
1	100	10000	62000	57432.2
1	200	40000	262000	269993.4
1	400	160000	1064000	1060002.8
1	800	640000	4099000	4099569.6

f(n) = c0*x^0 + c1*x^1+c2*x^2
f(n) = c0*r^0 + c1*r^1+c2*r^2

-33500 = c0
301.177 = c1
6.08145 = c2

r^0	N or r^1	r^2	f(n) Big0(n^2) C2=6.6	Fit f(n)	+ Delta Above
1	100	10000	66000	57432	8568
1	120	14400	95040	90214	4826
1	140	19600	129360	127861	1499
1	160	25600	168960	170373	-1413
1	180	32400	213840	217751	-3911
1	200	40000	264000	269993	-5993
1	220	48400	319440	327101	-7661
1	240	57600	380160	389074	-8914
1	260	67600	446160	455912	-9752
1	280	78400	517440	527615	-10175
1	300	90000	594000	604184	-10184
1	320	102400	675840	685617	-9777
1	340	115600	762960	771916	-8956
1	360	129600	855360	863080	-7720
1	380	144400	953040	959109	-6069
1	400	160000	1056000	1060003	-4003
1	420	176400	1164240	1165762	-1522
1	440	193600	1277760	1276387	1373
1	460	211600	1396560	1391876	4684
1	480	230400	1520640	1512231	8409
1	500	250000	1650000	1637451	12549
1	520	270400	1784640	1767536	17104
1	540	291600	1924560	1902486	22074
1	560	313600	2069760	2042302	27458
1	580	336400	2220240	2186982	33258
1	600	360000	2376000	2336528	39472
1	620	384400	2537040	2490939	46101
1	640	409600	2703360	2650215	53145
1	660	435600	2874960	2814356	60604
1	680	462400	3051840	2983363	68477
1	700	490000	3234000	3157234	76766
1	720	518400	3421440	3335971	85469
1	740	547600	3614160	3519573	94587
1	760	577600	3812160	3708040	104120
1	780	608400	4015440	3901372	114068
1	800	640000	4224000	4099570	124430