CS	F2	0	2

Programming Assignment 3

1 mit	Borase
AIIIIL	DUI ase

Input Size/Running Times	Naïve Multiplication	Karatsuba Multiplication
1	0.000482798	0
2	0.00050211	0
4	0.000511129	0.000499964
8	0.000956059	0.000960112
16	0.000989199	0.001940012
32	0.001958132	0.007804155
64	0.005865812	0.023220062
128	0.020529032	0.066472769
256	0.080164909	0.202384949
512	0.329437971	0.615164042
1024	1.420585871	1.824234009
2048	6.04685688	5.509873152
4096	26.44434404	16.64948106
8192	125.53233	49.51798677
10000	207.4704618	72.03054094
16384	724.761121	154.6943512
32768	4415.378922	447.8413539
65536	29218.405	1370.57646

KARATSUBA VS NAIVE MULTIPLICATION



