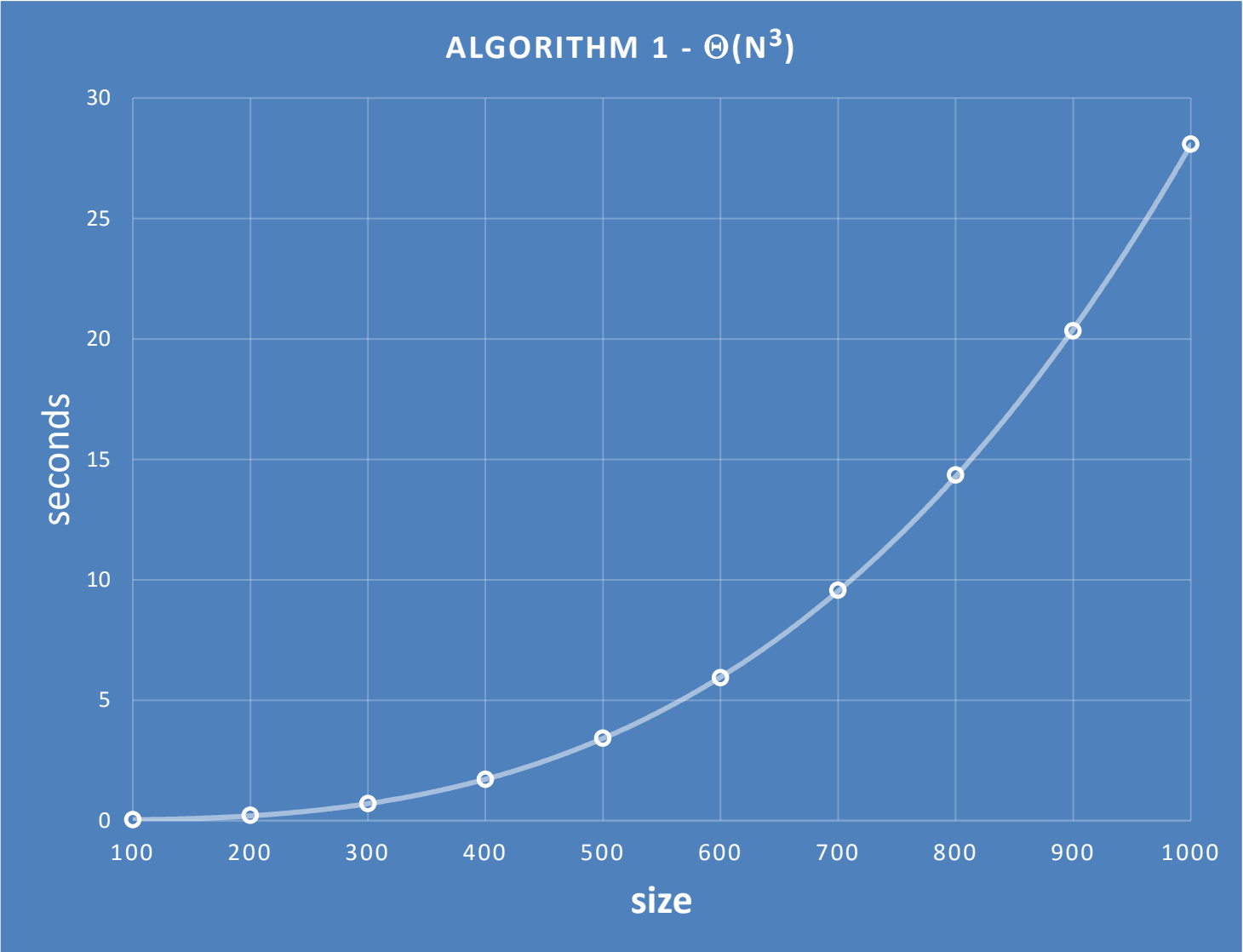


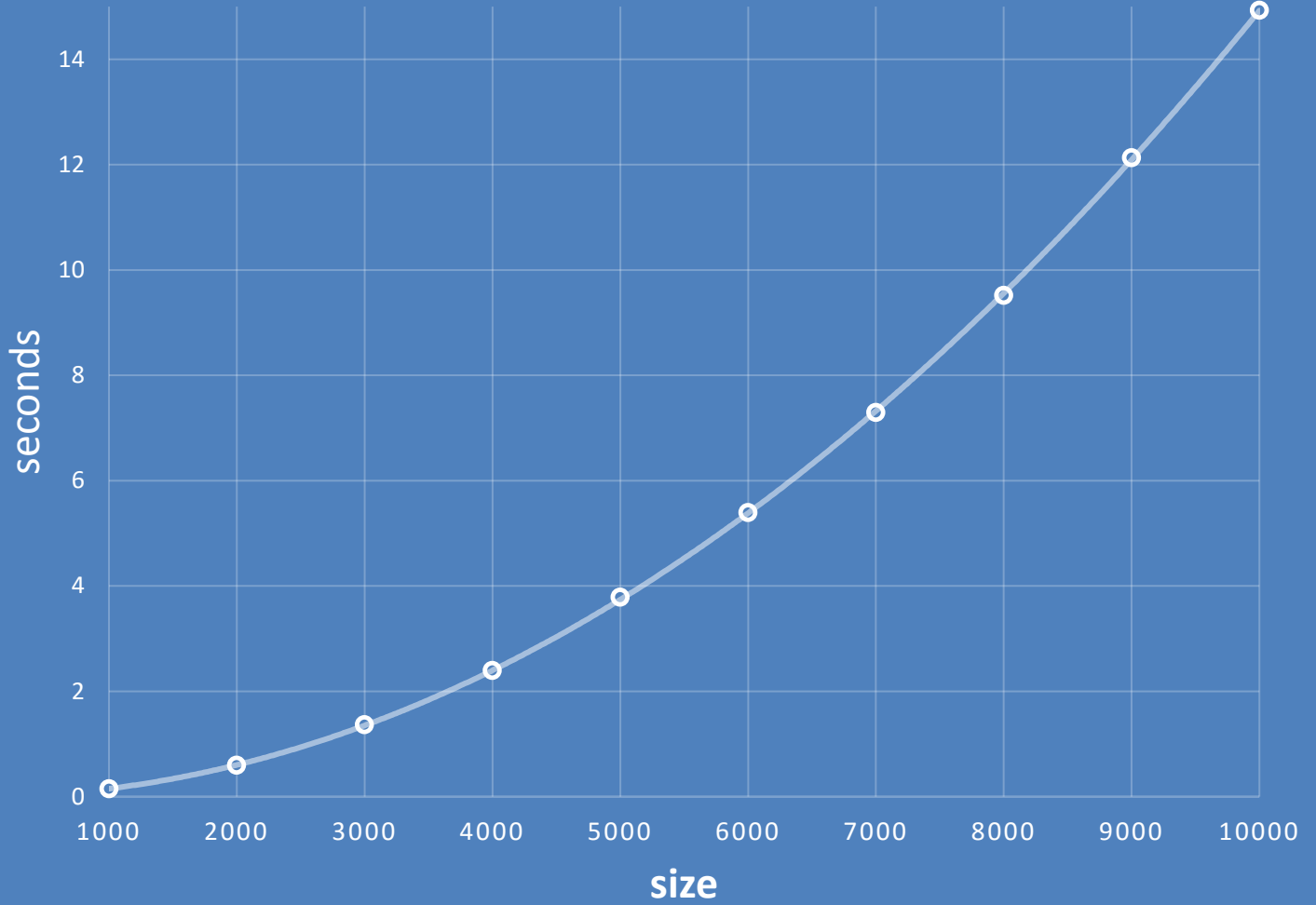
# Project 1 - Experimental Analysis

Project Group: Darnel Clayton, Rudy Gonzalez, Brad Parker



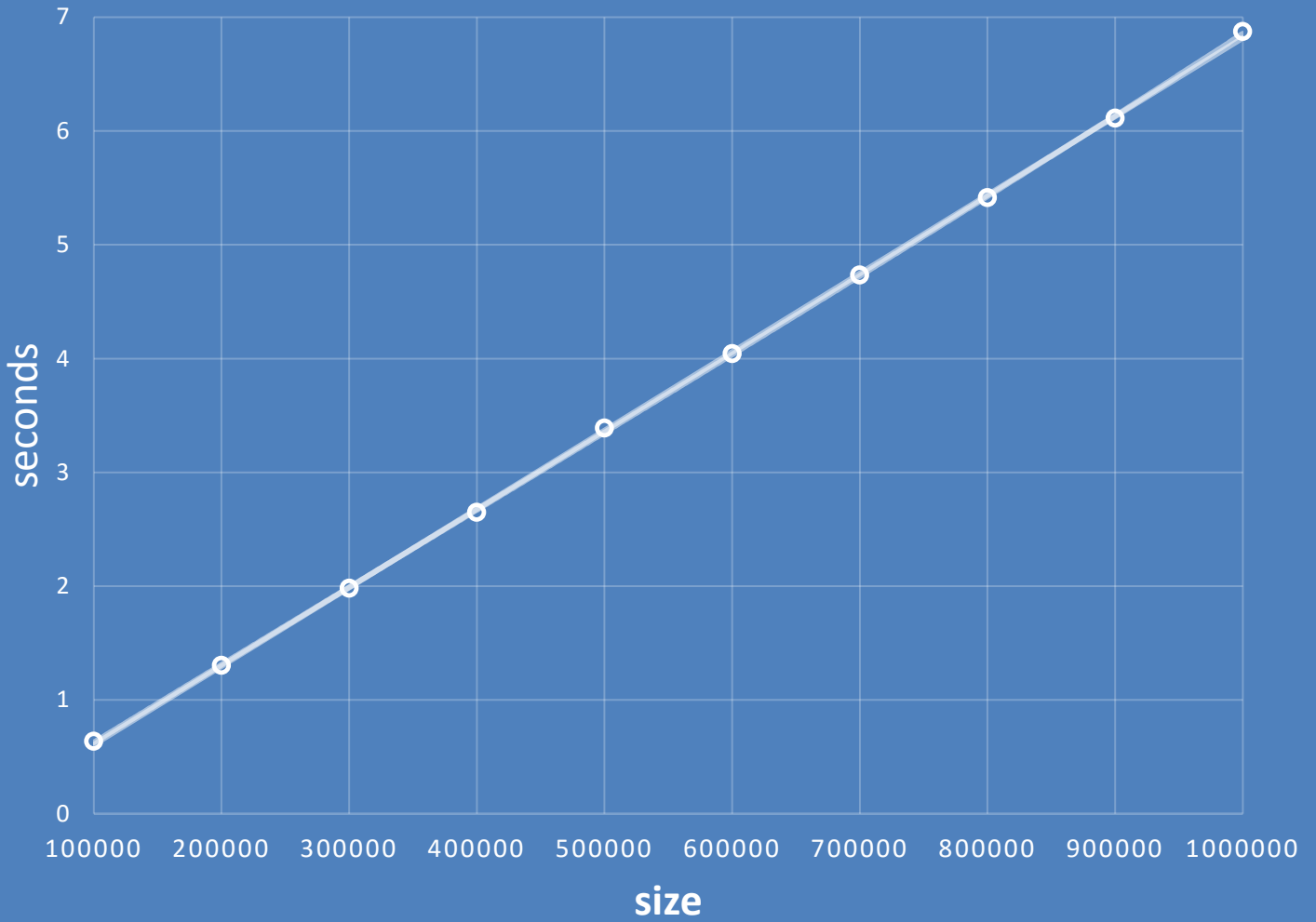
Input Size	Average Times
100	0.0290
200	0.2125
300	0.7038
400	1.7121
500	3.4121
600	5.9286
700	9.5556
800	14.3401
900	20.3288
1000	28.0818

## ALGORITHM 2 - $\Theta(N^2)$



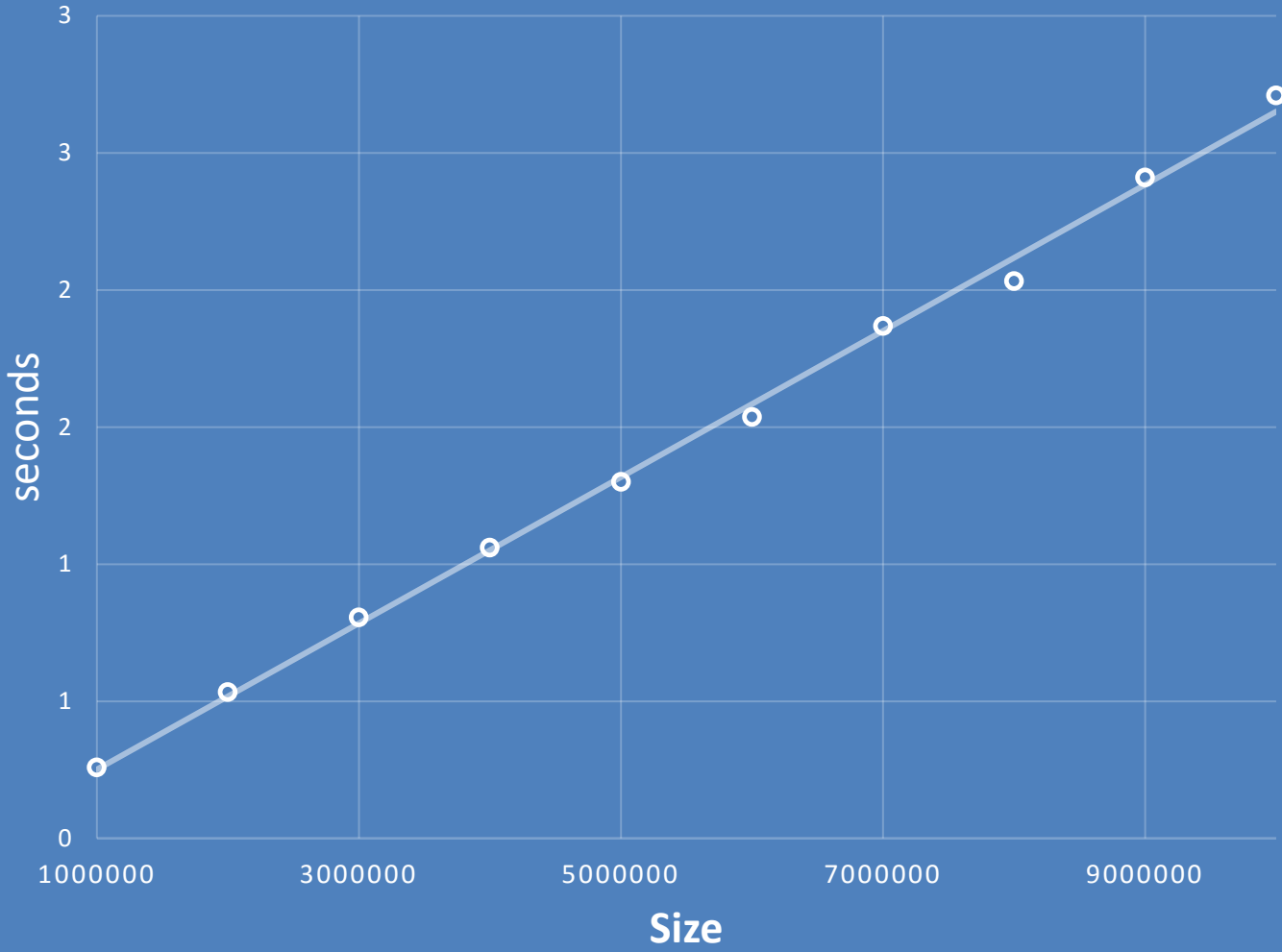
Input Size	Average Times
1000	0.1498
2000	0.5912
3000	1.3632
4000	2.3918
5000	3.7838
6000	5.3925
7000	7.2912
8000	9.5154
9000	12.1278
10000	14.9287

### ALGORITHM 3 - $\Theta(N \log N)$



Input Size	Average Times
100000	0.6370
200000	1.3030
300000	1.9801
400000	2.6483
500000	3.3875
600000	4.0416
700000	4.7328
800000	5.4140
900000	6.1112
1000000	6.8721

### ALGORITHM 4 - $\Theta(N)$



Input Size	Average Times
1000000	0.2574
2000000	0.5330
3000000	0.8054
4000000	1.0601
5000000	1.2999
6000000	1.5358
7000000	1.8677
8000000	2.0316
9000000	2.4100
10000000	2.7088