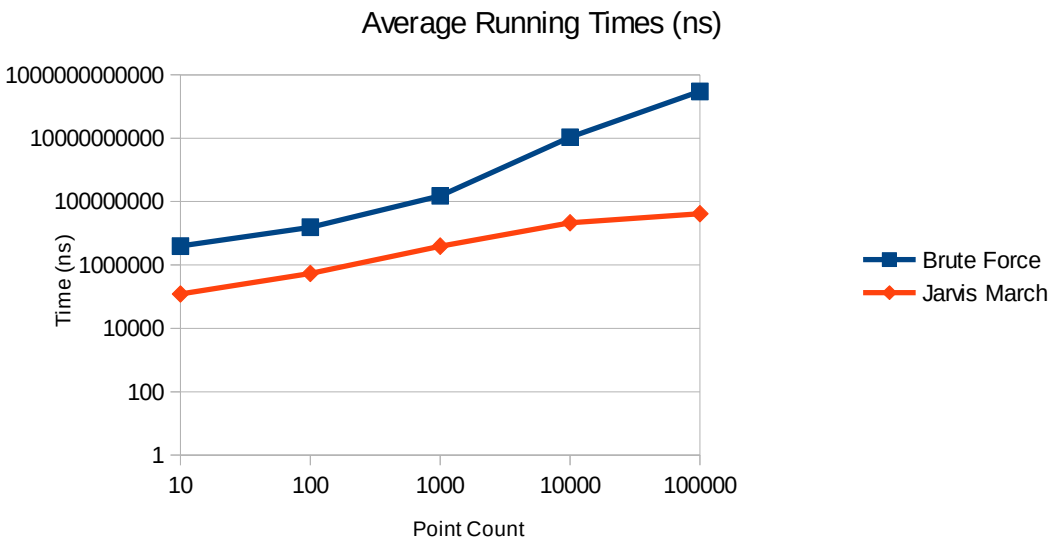
Sheet1

Point Count	Brute Force	Jarvis March
10	3945822	121513
100	15621592	542184
1000	152101058	3930194
10000	10734435497	21453894
100000	300000000000	41467493



The Brute Force and Jarvis March algorithms are quite different even though they both attempt to determine the same information. However, their approach is quite different. The Brute Force algorithm is quite simple and as its name suggests, checks every pair of points in the set to see if all other points lie on the same side. The Jarvis March algorithm, however, will only check pairs of points on the hull against the rest of the set. Jarvis can, potentially, be just as bad as the brute force algorithm. But, in practice, and according to the sample data, this is not usually the case. On average, Jarvis March very easily beats the brute force algorithm because all of the points in the input set would need to be a part of the hull for the Jarvis March algorithm to approach the brute force running times. Fortunately, this is highly unlikely.

The time for the brute force algorithm, although given a time in the graph, had timed out at five minutes.