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# Assignment 1 Report

| Input size | Brute force | Divide and Conquer |
|------------|-------------|--------------------|
| 10 | 0.000540 | 0.000241 |
| 100 | 0.025405 | 0.000990 |
| 10e5 | 122.420638 | 0.079709 |
| 10e6 | 15654.2759 | 1.027876 |

The brute force method should take $O(n^2)$ time to run and divide and conquer method should take $O(n\log(n))$ time to run which can be seen from the graph below