ray Size I	Insertion Sort (s)	Merge Sort (s)	Quick Sort (s)	Time Comparisons for Three Sorting Methods
1000	3.66E-03		3.16E-04	1.00E+03
1000	1.46E-03	9.81E-05	7.73E-05	1.00E+02
1000	1.48E-03	9.31E-05	8.76E-05	
10000	4.06E-02	8.65E-04	5.64E-04	1.00E+01
10000	1.47E-02	7.73E-04	5.18E-04	E 1.00E+00 200000 400000 600000 800000 1000000 1200000
10000	1.28E-02	7.53E-04	5.38E-04	1.00E-01
100000	1.35E+00	9.29E-03	6.92E-03	Ď 1.00E-02
100000	1.41E+00	8.96E-03	6.67E-03	1.00E-03
100000	1.33E+00	9.13E-03	6.61E-03	
1000000	1.41E+02	1.09E-01	7.61E-02	1.00E-04
1000000	1.41E+02	1.09E-01	7.82E-02	1.00E-05
1000000	1.39E+02	1.08E-01	8.21E-02	Array Size
				● Insertion Sort (s) ● Merge Sort (s) ● Quick Sort (s)

Insertion Sort Cutoff	Time Taken	Array Size			Ī							
C	4.11E-0	4 1000										
C	9.00E-0	3 100000										
C	1.02E-0	1 1000000										
5	5.20E-0	5 1000		Time Comparisons for Merge Sort with Insertion								
5	7.60E-0	3 100000		Sort Cutoff								
5	8.99E-0	2 1000000										
10	4.67E-0	5 1000		1.00E+00			0	15	20	25	30	35
10	7.08E-0	3 100000		0	Ĭ	3 1	0	12	20	45	30	35
10	8.76E-0	2 1000000		1.00E-01		•		•	•	•	•	
15	4.92E-0	5 1000		1.00E-02								
15	7.40E-0	3 100000		T		•			•	•	•	
15	9.01E-0	2 1000000		1.00E-03								
20	4.80E-0	5 1000		1.00E-04	•							
20	7.37E-0	3 100000				1						
20	8.69E-0	2 1000000				Ī		•	•	•	•	
25	4.15E-0	5 1000		1.00E-05 Insertion Sort Cutoff								
25	7.08E-0	3 100000		macriton sort cuton								
25	8.86E-0	2 1000000		1								
30	4.23E-0	5 1000										
30	7.12E-0	3 100000										
30	9.06E-0	2 1000000										

Time Comparisons for Median of Three vs Normal Partitioning in Merge Sort Array Size Median of Three Partitioning Normal Partitioning				Time Comparisons for Median of Three vs										
rray Size	Median of Three Partitioning	Normal Partitioning		Normal Partitioning in Merge Sort										
100000	8.11E-03	9.10E-03	1.00E+0	0	•									
100000	6.44E-03	6.17E-03		0	200	0000	400000	00 600	00000	8000	000	10000000	120000	000
100000	6.60E-03	6.62E-03												
1000000	8.11E-02	7.61E-02	1.00E-0	1										
1000000	8.36E-02	7.59E-02												
1000000	8.46E-02	7.92E-02												
10000000	9.04E-01	8.67E-01	1.00E-0	-02										
10000000	9.07E-01	8.95E-01												
10000000	9.23E-01	9.07E-01												
			1.00E-0	3										
			1.00E-0	3	- Ma	adian of	Three D	artitionin		Normal	Dartiti	oning		