

D = 32, M = 1000

		N = 200			N = 800			N = 1600		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
Serial	Euclid Quicksort	0.02133	0.023122	0.044452	0.074729	0.084901	0.15963	0.148413	0.167418	0.315831
		47.98%	52.02%	100.00%	46.81%	53.19%	100.00%	46.99%	53.01%	100.00%
	Euclid Mergesort	0.018935	0.020924	0.039859	0.078226	0.083202	0.161428	0.146966	0.166312	0.313278
		47.50%	52.50%	100.00%	48.46%	51.54%	100.00%	46.91%	53.09%	100.00%
	Euclid Bubblesort	0.019371	0.531754	0.551125	0.074229	2.143703	2.217932	0.147234	4.304201	4.451435
		3.51%	96.49%	100.00%	3.35%	96.65%	100.00%	3.31%	96.69%	100.00%
	Manhattan Quicksort	0.048478	0.020886	0.069364	0.191908	0.084287	0.276195	0.392653	0.170683	0.563336
		69.89%	30.11%	100.00%	69.48%	30.52%	100.00%	69.70%	30.30%	100.00%
	Manhattan Mergesort	0.04822	0.020996	0.069216	0.191624	0.084608	0.276232	0.382254	0.166384	0.548638
		69.67%	30.33%	100.00%	69.37%	30.63%	100.00%	69.67%	30.33%	100.00%
	Manhattan Bubblesort	0.048939	0.532164	0.581103	0.196771	2.199062	2.395833	0.383467	4.262315	4.645782
		8.42%	91.58%	100.00%	8.21%	91.79%	100.00%	8.25%	91.75%	100.00%

		N = 200			N = 800			N = 1600		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
Parallel – Sections	Euclid Quicksort	0.005218	0.022326	0.027544	0.019432	0.089591	0.109023	0.039463	0.178609	0.218072
		18.94%	81.06%	100.00%	17.82%	82.18%	100.00%	18.10%	81.90%	100.00%
	Euclid Mergesort	0.005017	0.012565	0.017582	0.02015	0.049569	0.069719	0.039265	0.097854	0.137119
		28.53%	71.47%	100.00%	28.90%	71.10%	100.00%	28.64%	71.36%	100.00%
	Euclid Bubblesort	0.005279	0.302504	0.307783	0.01984	1.206996	1.226836	0.039092	2.407322	2.446414
		1.72%	98.28%	100.00%	1.62%	98.38%	100.00%	1.60%	98.40%	100.00%
	Manhattan Quicksort	0.01245	0.022688	0.035138	0.050333	0.08931	0.139643	0.097206	0.182271	0.279477
		35.43%	64.57%	100.00%	36.04%	63.96%	100.00%	34.78%	65.22%	100.00%
	Manhattan Mergesort	0.012906	0.012428	0.025334	0.049283	0.048857	0.09814	0.097688	0.097834	0.195522
		50.94%	49.06%	100.00%	50.22%	49.78%	100.00%	49.96%	50.04%	100.00%
	Manhattan Bubblesort	0.012222	0.296567	0.308789	0.049104	1.201139	1.250243	0.097324	2.401881	2.499205
		3.96%	96.04%	100.00%	3.93%	96.07%	100.00%	3.89%	96.11%	100.00%

D = 32, M = 10000

		N = 200			N = 800			N = 1600		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
	Euclid Quicksort	0.185437	0.278401	0.463838	0.742582	1.142975	1.885557	1.49807	2.263777	3.761847
		39.98%	60.02%	100.00%	39.38%	60.62%	100.00%	39.82%	60.18%	100.00%
	Euclid Mergesort	0.185513	0.270867	0.45638	0.745718	1.086814	1.832532	1.504401	2.174905	3.679306
		40.65%	59.35%	100.00%	40.69%	59.31%	100.00%	40.89%	59.11%	100.00%

Sheet1

Serial	Euclid Bubblesort	0.184268	69.25875	69.443018	0.737184	276.673706	277.41089	1.515635	555.761849	557.277484
		0.27%	99.73%	100.00%	0.27%	99.73%	100.00%	0.27%	99.73%	100.00%
	Manhattan Quicksort	0.471655	0.278674	0.750329	1.932381	1.127525	3.059906	3.823178	2.227547	6.050725
		62.86%	37.14%	100.00%	63.15%	36.85%	100.00%	63.19%	36.81%	100.00%
	Manhattan Mergesort	0.47597	0.274112	0.750082	1.904061	1.093334	2.997395	3.903143	2.232834	6.135977
		63.46%	36.54%	100.00%	63.52%	36.48%	100.00%	63.61%	36.39%	100.00%
	Manhattan Bubblesort	0.471319	69.964528	70.435847	1.887251	279.456457	281.343708	3.847039	555.535158	559.382197
		0.67%	99.33%	100.00%	0.67%	99.33%	100.00%	0.69%	99.31%	100.00%
	N = 200			N = 800			N = 1600			
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
Parallel – Sections	Euclid Quicksort	0.047862	0.297711	0.345573	0.190373	1.194485	1.384858	0.379271	2.390482	2.769753
		13.85%	86.15%	100.00%	13.75%	86.25%	100.00%	13.69%	86.31%	100.00%
	Euclid Mergesort	0.072815	0.155163	0.227978	0.190162	0.625722	0.815884	0.388684	1.25202	1.640704
		31.94%	68.06%	100.00%	23.31%	76.69%	100.00%	23.69%	76.31%	100.00%
	Euclid Bubblesort	0.047736	16.933148	16.980884	0.19027	66.511185	66.701455	0.383545	142.115242	142.498787
		0.28%	99.72%	100.00%	0.29%	99.71%	100.00%	0.27%	99.73%	100.00%
	Manhattan Quicksort	0.120505	0.297456	0.417961	0.480964	1.194215	1.675179	0.974073	2.382374	3.356447
		28.83%	71.17%	100.00%	28.71%	71.29%	100.00%	29.02%	70.98%	100.00%
	Manhattan Mergesort	0.12055	0.154432	0.274982	0.481281	0.626853	1.108134	0.966649	1.241424	2.208073
		43.84%	56.16%	100.00%	43.43%	56.57%	100.00%	43.78%	56.22%	100.00%
Parallel – Sections	Manhattan Bubblesort	0.120661	16.675757	16.796418	0.481504	68.690477	69.171981	1.251648	132.479225	133.730873
		0.72%	99.28%	100.00%	0.70%	99.30%	100.00%	0.94%	99.06%	100.00%
	N = 800, M = 5000									
		D = 64			D = 128			D = 256		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
	Euclid Quicksort	0.674948	0.515213	1.190161	1.315786	0.515559	1.831345	2.841606	0.535521	3.377127
		56.71%	43.29%	100.00%	71.85%	28.15%	100.00%	84.14%	15.86%	100.00%
	Manhattan Quicksort	1.976354	0.520283	2.496637	4.081035	0.512601	4.593636	8.34295	0.510896	8.853846
		79.16%	20.84%	100.00%	88.84%	11.16%	100.00%	94.23%	5.77%	100.00%
		D = 64			D = 128			D = 256		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
Serial	Euclid Quicksort	0.177186	0.553123	0.730309	0.351709	0.55312	0.904829	0.686863	0.550247	1.23711
		24.26%	75.74%	100.00%	38.87%	61.13%	100.00%	55.52%	44.48%	100.00%
	Manhattan Quicksort	0.501356	0.551249	1.052605	1.285376	0.600948	1.886324	2.097209	0.54858	2.645789
		47.63%	52.37%	100.00%	68.14%	31.86%	100.00%	79.27%	20.73%	100.00%
Parallel – Sections	Euclid Quicksort	0.177186	0.553123	0.730309	0.351709	0.55312	0.904829	0.686863	0.550247	1.23711
		24.26%	75.74%	100.00%	38.87%	61.13%	100.00%	55.52%	44.48%	100.00%
	Manhattan Quicksort	0.501356	0.551249	1.052605	1.285376	0.600948	1.886324	2.097209	0.54858	2.645789
		47.63%	52.37%	100.00%	68.14%	31.86%	100.00%	79.27%	20.73%	100.00%

Total
1.428808
Total
1.408651
Total
14.84321

Total	Average Speedup
0.808897	0.566134148185061 1.766365804
Total	
0.543416	0.385770499577255 2.592214804
Total	
8.03927	0.541612629613136 1.846338038

Total
15.972202
Total
15.851672
Total

1815.293144

Total	Average Speedup
9.949771	0.622942973047799
Total	
6.275755	0.395904924098858
Total	
445.880398	0.245624459869607

D = 512				
Dist	Sort	Total	Total	
5.132581	0.506111	5.638692	12.037325	
91.02%	8.98%	1		
16.495382	0.506719	17.002101	32.94622	
97.02%	2.98%	1		
D = 512				
Dist	Sort	Total	Total	Speedup
1.34542	0.541005	1.886425	4.758673	0.395326453
71.32%	28.68%	1		
4.200083	0.543786	4.743869	10.328587	0.313498392
88.54%	11.46%	1		

		N = 200			N = 800			N = 1600		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
Serial	Euclid Quicksort	0.185437 39.98%	0.278401 60.02%	0.463838	0.742582 39.38%	1.142975 60.62%	1.885557	1.49807 39.82%	2.263777 60.18%	3.761847
	Euclid Mergesort	0.185513 40.65%	0.270867 59.35%	0.45638	0.745718 40.69%	1.086814 59.31%	1.832532	1.504401 40.89%	2.174905 59.11%	3.679306
	Euclid Bubblesort	0.184268 0.27%	69.25875 99.73%	69.443018	0.737184 0.27%	276.673706 99.73%	277.41089	1.515635 0.27%	555.761849 99.73%	557.277484
	Manhattan Quicksort	0.471655 62.86%	0.278674 37.14%	0.750329	1.932381 63.15%	1.127525 36.85%	3.059906	3.823178 63.19%	2.227547 36.81%	6.050725
	Manhattan Mergesort	0.47597 63.46%	0.274112 36.54%	0.750082	1.904061 63.52%	1.093334 36.48%	2.997395	3.903143 63.61%	2.232834 36.39%	6.135977
	Manhattan Bubblesort	0.471319 0.67%	69.964528 99.33%	70.435847	1.887251 0.67%	279.456457 99.33%	281.343708	3.847039 0.69%	555.535158 99.31%	559.382197
		N = 200			N = 800			N = 1600		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
Parallel – Sections	Euclid Quicksort	0.047862 13.85%	0.297711 86.15%	0.345573	0.190373 13.75%	1.194485 86.25%	1.384858	0.379271 13.69%	2.390482 86.31%	2.769753
	Euclid Mergesort	0.072815 31.94%	0.155163 68.06%	0.227978	0.190162 23.31%	0.625722 76.69%	0.815884	0.388684 23.69%	1.25202 76.31%	1.640704
	Euclid Bubblesort	0.047736 0.28%	16.933148 99.72%	16.980884	0.19027 0.29%	66.511185 99.71%	66.701455	0.383545 0.27%	142.115242 99.73%	142.498787
	Manhattan Quicksort	0.120505 28.83%	0.297456 71.17%	0.417961	0.480964 28.71%	1.194215 71.29%	1.675179	0.974073 29.02%	2.382374 70.98%	3.356447
	Manhattan Mergesort	0.12055 43.84%	0.154432 56.16%	0.274982	0.481281 43.43%	0.626853 56.57%	1.108134	0.966649 43.78%	1.241424 56.22%	2.208073
	Manhattan Bubblesort	0.120661 0.72%	16.675757 99.28%	16.796418	0.481504 0.70%	68.690477 99.30%	69.171981	1.251648 0.94%	132.479225 99.06%	133.730873