

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%
Parallel – Sections	Euclid Quicksort	N = 200			N = 800			N = 1600		
		Dist	Sort	Total	Dist	Sort	Total	Dist	Sort	Total
	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%
	Euclid Bubblesort	0.184268	69.25875	69.443018	0.737184	276.673706	277.41089	1.515635	555.761849	557.277484

Sheet1

Serial	Euclid Bubblesort	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%
Parallel – Sections	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
	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%
	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%
Serial		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
	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
Total	
0.543416	0.385770499577255
Total	
8.03927	0.541612629613136

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	0.02133	0.023122	0.044452	0.074729	1.074729	2.074729	4.074729	5.074729	6.074729
		47.98%	52.02%		3.60%	51.80%		67.08%	83.54%	
	Euclid Mergesort	0.018935	0.020924	0.039859	0.078226	0.083202	0.161428	0.146966	0.166312	0.313278
		47.50%	52.50%		48.46%	51.54%		46.91%	53.09%	
	Euclid Bubblesort	0.019371	0.531754	0.551125	0.074229	2.143703	2.217932	0.147234	4.304201	4.451435
		3.51%	96.49%		3.35%	96.65%		3.31%	96.69%	
	Manhattan Quicksort	0.048478	0.020886	0.069364	0.191908	0.084287	0.276195	0.392653	0.170683	0.563336
		69.89%	30.11%		69.48%	30.52%		69.70%	30.30%	
	Manhattan Mergesort	0.04822	0.020996	0.069216	0.191624	0.084608	0.276232	0.382254	0.166384	0.548638
		69.67%	30.33%		69.37%	30.63%		69.67%	30.33%	
	Manhattan Bubblesort	0.048939	0.532164	0.581103	0.196771	2.199062	2.395833	0.383467	4.262315	4.645782
		8.42%	91.58%		8.21%	91.79%		8.25%	91.75%	
		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%		17.82%	82.18%		18.10%	81.90%	
	Euclid Mergesort	0.005017	0.012565	0.017582	0.02015	0.049569	0.069719	0.039265	0.097854	0.137119
		28.53%	71.47%		28.90%	71.10%		28.64%	71.36%	
	Euclid Bubblesort	0.005279	0.302504	0.307783	0.01984	1.206996	1.226836	0.039092	2.407322	2.446414
		1.72%	98.28%		1.62%	98.38%		1.60%	98.40%	
	Manhattan Quicksort	0.01245	0.022688	0.035138	0.050333	0.08931	0.139643	0.097206	0.182271	0.279477
		35.43%	64.57%		36.04%	63.96%		34.78%	65.22%	
	Manhattan Mergesort	0.012906	0.012428	0.025334	0.049283	0.048857	0.09814	0.097688	0.097834	0.195522
		50.94%	49.06%		50.22%	49.78%		49.96%	50.04%	
	Manhattan Bubblesort	0.012222	0.296567	0.308789	0.049104	1.201139	1.250243	0.097324	2.401881	2.499205
		3.96%	96.04%		3.93%	96.07%		3.89%	96.11%	