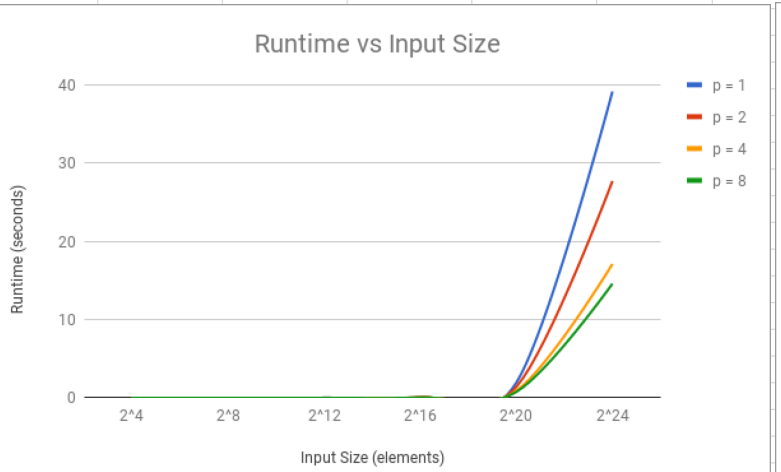
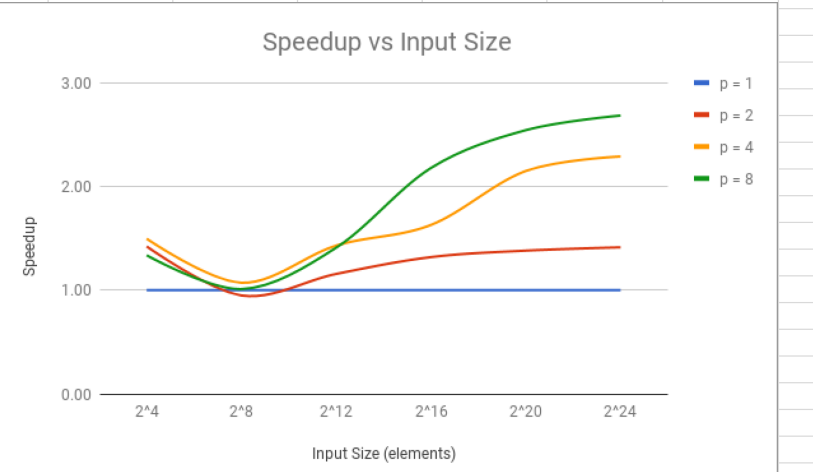


Runtime on Inputs of Different Sizes with 1 processor							Runtime on Inputs of Different Sizes with 2 processors							Runtime on Inputs of Different Sizes with 4 processors							Runtime on Inputs of Different Sizes with 8 processors										
Trial	n = 2^4; p = 1	n = 2^8; p = 1	n = 2^12; p = 1	n = 2^16; p = 1	n = 2^20; p = 1	n = 2^24; p = 1	n = 2^4; p = 2	n = 2^8; p = 2	n = 2^12; p = 2	n = 2^16; p = 2	n = 2^20; p = 2	n = 2^24; p = 2	n = 2^4; p = 4	n = 2^8; p = 4	n = 2^12; p = 4	n = 2^16; p = 4	n = 2^20; p = 4	n = 2^24; p = 4	n = 2^4; p = 8	n = 2^8; p = 8	n = 2^12; p = 8	n = 2^16; p = 8	n = 2^20; p = 8	n = 2^24; p = 8							
1	0.0021	0.0009	0.0051	0.0925	1.9231	38.8337	0.0010	0.0009	0.0044	0.0696	1.6392	28.5454	0.0011	0.0008	0.0031	0.0465	0.9861	17.0748	0.0013	0.0009	0.0035	0.0435	0.7641	14.5963							
2	0.0019	0.0009	0.0051	0.0922	1.9384	40.5839	0.0008	0.0009	0.0044	0.0702	1.4272	27.9727	0.0009	0.0008	0.0037	0.0589	0.8900	17.0511	0.0009	0.0009	0.0036	0.0435	0.7716	14.6459							
3	0.0019	0.0009	0.0051	0.0925	1.9258	38.9654	0.0008	0.0010	0.0043	0.0701	1.4021	27.8854	0.0009	0.0009	0.0038	0.0584	0.8901	17.1803	0.0008	0.0009	0.0036	0.0408	0.7687	14.5486							
4	0.0019	0.0009	0.0051	0.0922	1.9459	39.2115	0.0009	0.0011	0.0044	0.0702	1.3952	27.5725	0.0008	0.0008	0.0031	0.0574	0.9855	16.9686	0.0008	0.0009	0.0034	0.0422	0.7658	14.6296							
5	0.0013	0.0010	0.0051	0.0923	1.9211	38.8124	0.0009	0.0009	0.0043	0.0696	1.4011	27.8577	0.0007	0.0009	0.0031	0.0591	0.9552	17.0121	0.0008	0.0009	0.0035	0.0429	0.7642	14.5679							
6	0.0014	0.0009	0.0051	0.0921	2.2426	38.8137	0.0008	0.0009	0.0043	0.0699	1.3991	27.4426	0.0007	0.0008	0.0038	0.0547	0.9259	16.9995	0.0008	0.0009	0.0036	0.0416	0.7671	14.5597							
7	0.0013	0.0009	0.0051	0.0925	2.0047	38.8038	0.0007	0.0011	0.0045	0.0702	1.4169	28.0005	0.0008	0.0009	0.0038	0.0591	0.8892	17.4547	0.0008	0.0009	0.0032	0.0407	0.7721	14.6416							
8	0.0014	0.0009	0.0050	0.0923	1.9282	39.0428	0.0008	0.0010	0.0043	0.0702	1.4007	27.5553	0.0007	0.0009	0.0039	0.0590	0.8900	16.9961	0.0014	0.0009	0.0037	0.0425	0.7672	14.6532							
9	0.0012	0.0010	0.0050	0.0934	2.0079	38.7340	0.0008	0.0010	0.0043	0.0701	1.3922	27.4676	0.0008	0.0008	0.0032	0.0570	0.8901	17.6077	0.0008	0.0009	0.0030	0.0457	0.7737	14.5439							
10	0.0010	0.0009	0.0049	0.0924	1.9228	39.1538	0.0008	0.0010	0.0044	0.0698	1.3923	27.4297	0.0007	0.0009	0.0038	0.0566	0.8913	16.9938	0.0008	0.0009	0.0038	0.0495	0.7708	14.6894							
11	0.0007	0.0009	0.0050	0.0926	1.9252	38.8214	0.0008	0.0010	0.0043	0.0699	1.4086	27.7132	0.0007	0.0008	0.0033	0.0592	0.8941	17.0709	0.0008	0.0009	0.0035	0.0417	0.7633	14.5474							
12	0.0008	0.0009	0.0049	0.0923	1.9220	39.1564	0.0007	0.0010	0.0043	0.0700	1.3901	27.7631	0.0008	0.0009	0.0036	0.0539	0.8891	17.0650	0.0008	0.0009	0.0038	0.0408	0.7735	14.6055							
13	0.0007	0.0009	0.0049	0.0925	1.9434	38.8582	0.0007	0.0010	0.0043	0.0704	1.4017	27.7256	0.0007	0.0009	0.0039	0.0588	0.8897	16.9658	0.0008	0.0009	0.0038	0.0434	0.7645	14.6507							
14	0.0008	0.0009	0.0050	0.0923	1.9507	40.4013	0.0007	0.0009	0.0044	0.0715	1.3941	27.4764	0.0007	0.0009	0.0031	0.0461	0.8919	16.9902	0.0008	0.0010	0.0036	0.0422	0.7660	14.5556							
15	0.0007	0.0009	0.0049	0.0923	1.9219	38.8165	0.0008	0.0010	0.0042	0.0700	1.3921	27.7311	0.0007	0.0009	0.0039	0.0571	0.8904	17.0799	0.0008	0.0009	0.0035	0.0413	0.7646	14.5487							
16	0.0007	0.0009	0.0049	0.0936	1.9287	39.0655	0.0007	0.0010	0.0043	0.0700	1.4011	27.6801	0.0007	0.0009	0.0032	0.0590	0.8997	17.1353	0.0008	0.0009	0.0036	0.0411	0.7644	14.5592							
17	0.0008	0.0010	0.0049	0.0923	1.9336	39.4052	0.0008	0.0009	0.0042	0.0701	1.4126	27.3960	0.0007	0.0009	0.0039	0.0589	0.8892	17.0201	0.0008	0.0009	0.0038	0.0421	0.7796	14.5952							
18	0.0007	0.0009	0.0049	0.0922	1.9224	38.9157	0.0008	0.0008	0.0043	0.0702	1.4185	27.6813	0.0007	0.0009	0.0033	0.0589	0.9211	17.1756	0.0008	0.0009	0.0032	0.0409	0.7648	14.5499							
19	0.0007	0.0009	0.0049	0.0922	1.9227	39.8679	0.0008	0.0010	0.0042	0.0702	1.3908	27.8111	0.0007	0.0009	0.0032	0.0576	0.9251	17.0328	0.0008	0.0009	0.0038	0.0407	0.7683	14.5610							
20	0.0007	0.0009	0.0049	0.0932	1.9235	38.8783	0.0009	0.0012	0.0043	0.0704	1.4039	27.4775	0.0007	0.0008	0.0032	0.0590	0.8918	17.3236	0.0008	0.0009	0.0035	0.0423	0.7671	14.6091							
Average	0.0011	0.0009	0.0050	0.0925	1.9527	39.1571	0.0008	0.0010	0.0043	0.0701	1.4140	27.7092	0.0008	0.0009	0.0035	0.0568	0.9088	17.1099	0.0009	0.0009	0.0035	0.0425	0.7681	14.5929							
Average Runtime on Inputs of Different Sizes							<div><div>Runtime vs Input Size</div></div> <div><div>Speedup vs Input Size</div></div>																								
Input Size	2^4	2^8	2^12	2^16	2^20	2^24																									
p = 1	0.0011	0.0009	0.0050	0.0925	1.9527	39.1571																									
p = 2	0.0008	0.0010	0.0043	0.0701	1.4140	27.7092																									
p = 4	0.0008	0.0009	0.0035	0.0568	0.9088	17.1099																									
p = 8	0.0009	0.0009	0.0035	0.0425	0.7681	14.5929																									
Speedup on Inputs of Different Sizes																															
Input Size	2^4	2^8	2^12	2^16	2^20	2^24																									
p = 1	1.00	1.00	1.00	1.00	1.00	1.00																									
p = 2	1.42	0.95	1.16	1.32	1.38	1.41																									
p = 4	1.50	1.07	1.43	1.63	2.15	2.29																									
p = 8	1.34	1.01	1.41	2.18	2.54	2.68																									