VectorB	VectorBprime	Difference	RMSE
270.155552	270.155552	0	0
1110.827922	1110.827922	0	
664.874767	664.874767	0	
1928.304392	1928.304392	0	
1750.996775	1750.996775	0	
661.9596	661.9596	0	
672.955505	672.955505	0	
1469.020571	1469.020571	0	

ECE 4730
Assignment 3
Aaron Bruner
Fall 2022

Number of Processors \ Matrix Size	100	500	1000	1500	2000	3000	5000	10000
1	0.023	0.181	0.679	1.518	2.686	6.03	16.691	66.683
2	0.26	0.521	0.549	1.029	1.715	3.735	9.772	38.918
4	1.734	3.853	4.742	3.655	12.96	21.464	13.152	206.901
8	10.456	19.659	24.503	43.16	34.927	45.224	95.993	492.663
16	5.648	7.49	9.34	9.177	8.897	12.029	18.53	37.108
32	6.616	8.329	10.609	11.2	11.338	12.916	37.924	80.924
64	8.675	9.071	10.326	12.22	12.591	13.894	75.041	89.776

It's very clear that as the size of our matrix increases the time it takes to process also increasees. It actually seems to be slower to process more data with more processors. This could be due to many things. Most likely something wrong with my MPI code.