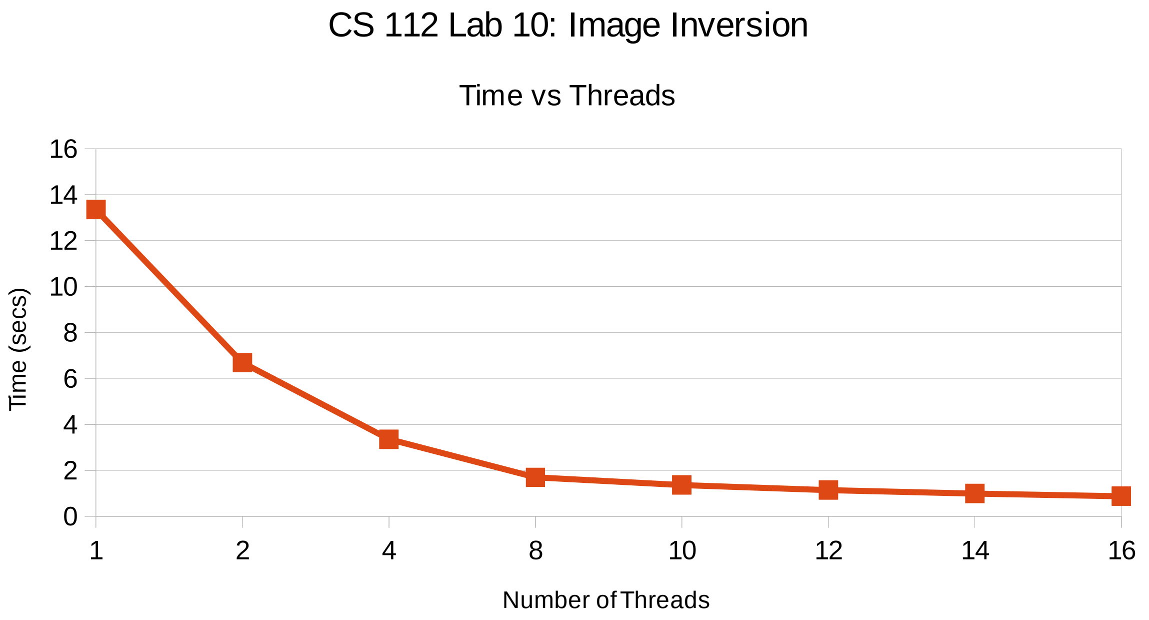
NumThreads	Time
1	13.3544
2	6.68977
4	3.35537
8	1.69325
10	1.35737
12	1.14095
14	0.988266
16	0.873976



The #pragma omp parallel for directive does not divide up a loops iterations the same way as a “chunk-size 1” approach because when processing with the #pragma omp parallel for, you are able to see each thread processing individually whereas with the “chunk-size 1” approach, it looks like one thread is processing it at a very fast rate.

The #pragma omp parallel for directive uses an “equal-sized chunks” approach to divide up it’s loop iterations. You can tell because each thread starts out and ends at a specific row, each one of equal size.

It seems that the relationship between the number of threads used and the time it takes to process an image is inverse exponential based on the shape of the curve; as the number of threads increases, the time it takes decreases with a decreasing rate.