

## Homework 7 Answers

### Question 1

Using `GOMAXPROCS=1` the sequential program finished in about 2.2s. With a worker pool equal to `runtime.NumCPU()` (8 on my machine) and dispatching rows over a channel the runtime dropped to roughly 0.9s – a bit over a 2× speed-up on my machine. A variant that queued every pixel individually took around 0.7s but used far more goroutines and did not scale much better.

### Question 2

The best results came from using a worker count near the number of CPUs. More goroutines gave no significant improvement and sometimes slowed the program due to scheduling overhead.