ISC 4304C

Lab 10

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Runtimes:

* Original version: driver.py
  + Pure python = run time: 14.328125
  + Numba = run time: 0.5
* Multiprocessing version: driver2.py
  + Pure python = run time: 3.21875
  + Numba = run time: 0.25

As seen above, multiprocessing was able to lower the execution time from 14.328125 seconds to merely 3.21875 seconds in the pure python code. While for the numba version the execution time was lowered from 0.5 seconds to 0.25 seconds (although the speed ups due to the use of multiprocessing can vary). It should be noted that the code was barely changed from the original, just changing a few lines in the mandelbrot\_image function to specify the use pool form the multiprocessing module, as seen in the driver2.py file. This is a very noticeable speed up for very little effort.