# Summary of Lab + Basic Questions

## Part 1:

* Setup and imports – confirming correct version control and GPU usage (if using GPU)
* Moving a grid to a tensor – allowing for GPU acceleration when performing calculations,
* Implement function and plot

### 1a)

* See code. Simply change the relevant line of code

### 1b)

* You get a bunch of lines or a gabor filter. I changed the input values to illustrate it better. It’s explained in the content well

## Part 2

* Imports
* Send x and y to the complex plane
* Setup the GPU
* Build the Mandelbrot set
* Show a specific section of the Mandelbrot set (processFractal)

### 2a)

* See code – interesting squiggle part

### 2b)

* Julia set uses fixed complex number – see code for two existing non-complex tensors

### 3a)

* Chose the Lyapunov Fractal, flicks between values A and B periodically
* Input the sequence for the fractal “RRLRLRRL”
* Code uses the second part of [6] in the wiki formula
* #Explanation of Paralellisim
  + Still calculating the tensors in the GPU
  + Doinh operations for the 1-200 set in GPU
  + Imagine doing 200 pixels 1 at a time but simultaneous not sequential
  + If upper number from 200, more apparent