Test Logs

A compilation of testing woes, debugging, and many tears which were shed.

**Initial Aims**

1. Change uses of lists [] to np.array where possible to improve efficiency. (I’m not very good at using np.append and np.zeros, so this will be quite the experience for me).
2. Remove uses of enumerate function, in favour of np.ndenumerate if possible.
3. Check docstring formatting is consistent, as is the list of functions and properties is consistent (e.g. speed, KE, temperature, pressure, etc.).
4. Create a final minified version of the Python code when testing, to run more repeats.
5. Use np.linspace instead of nested for-loops to increase efficiency.
6. Make sure singular/plural variable names is consistent between Python files.
7. Make sure spacing is appropriate between lines, and commenting is aligned.
8. Commenting should be judicious, in order to avoid cluttering the “flow” of the code and readibility. However, inline commenting is acceptable when spaced correctly. Commenting in every line is acceptable only for the initialisation and run functions.
9. Split the next\_collision function into the three steps outline by the lab script, to increase flexibility in the order of which the operations can be performed, as well as clarity (this is because many targeted functions > one large convoluted function).
10. Implement an “event” Class for each collision, to store vital information about ball pairs.

**Final Tests**

1. Test the working functionality of Ball.py, the ball class, as well as the Container.