***These assessments can be open ended so you will need to just decide on how far you can get in the time given and taking into account you have 4 other modules.***

Worth 50% in total split into 4 tasks done in the same Jupyter notebook.

The PDF will be updated every time a task is added.

**Marking Scheme:**

It is important that your submission provides direct evidence of each of the items listed in each category (***add a file with research and your workings***).

* 25% Research - Show everything you look up (or at least the stuff you use). Track what you're googling. Put that in. Demonstrate you found good references, not just for the problem but for your level of understanding of the problem.
* 25% Development - Well commented code. Actual code is worth 20%(ish) with 5%(ish) going to structure and commenting. **This is not the main bulk of the assessment.**
* 25% Consistency - Provide a really good git commit history.
* 25% Documentation - Explanation, Read me, commit history.

**Task 1:**

Create a function that prints the square root of 2 to 100 decimal places. You can't use any modules. Research and collect references and explain your algorithm in the notebook. Call your function sqrt2(). This, along with relevant files like a README, should be in a single git repository synced with a hosting provider like GitHub:

* Look up the math to find the square root.
* Q: How to limit/get 100 decimal places?