Some Pointers on Report Writing

Below are some guidelines for writing your report. The purpose of this list is not to cover all the basics of writing a report, but to highlight specific points that deserve mentioning. Therefore the list does not cover all the details of report writing, and it is assumed that the basics are familiar to you.

- 1. Describe numerical schemes in as much detail as possible; even if you are not asked to do so. The level of detail depends on the method. While some methods in the course can be easily described in full, others may be too complex for that. A reader should be able to have a general understanding of what you have done.
- 2. You may add your code in an appendix at the end of the report, but remember that this does not account for the description of the method.
- 3. When computing an error, specify how it is computed (what norm etc.).
- 4. To measure the order of convergence of a scheme whose error e is expected to behave like ah^q , use a log-log scale in your figures. The reason to do so is that due to $\log e \sim q \log h + \log a$, asymptotically on this scale, the graph is close to a graph of an affine function whose slope q is the order of convergence. You may want to add a reference line to complement this slope.
- 5. All the figures should be addressed in the text, and have captions explaining what is shown. A reader should be abel to have a general understanding of a figure just by looking at it and reading its caption.
- 6. Make sure figures are large enough to read. Label axes in a meaningful way, and make sure there are at least two labeled data tips on each axis, to show the scale of the data.
- 7. Add a legend when necessary. If you print your report in black and white, make sure figures are understandable.