

Getting Started with LaTeX

LaTeX is a freely available typesetting system. It is overkill when all you want is a short memo, but increasingly attractive for longer projects and when you want beautiful text. LaTeX is especially useful for technical contexts including math and logic. I am not a technical advisor! Still, if you are interested in LaTeX, here is something that might get you started:

On either a PC or Mac install the [MiKTeX system](#). If you are installing on Apple, you can work within TeXShop (or TeXMaker) that comes with the LaTeX distribution. On PC I prefer [WinShell](#). LaTeX will produce .pdf documents. For Apple there is an internal PDF reader. For PC, the free Adobe PDF reader is fine. However, with WinShell I prefer [SumatraPDF](#). Once this is installed, in WinShell you need to go to Options\ProgramCalls\PDFView and replace the Adobe path with the path for SumatraPDF, c:\program files (x86)\. . . The Adobe PDF reader seems to “lock” the file so that a new compile won’t work unless the previous PDF is closed. SumatraPDF doesn’t do this, and a new compile will open to the very spot on which you are working. Nice.

To get started, put preamble.tex and test.tex in a directory of their own (as some additional files will be created upon compile). Call test.tex into TeXShop or WinShell. On WinShell, be sure “current document” is the active file (indicated in bold on the left). You can compile it by pressing ‘typset’ in TeXShop or the PDF button (with two down arrows above it) in WinShell. This should result in some activity, resulting in a number of warning messages. Then compile again. (The warning messages are because test.tex includes a couple derivations, one of which sets line numbers by a counter---LaTeX requires two compiles for a counter, once to find the anchor and another to update the file.) The second compile should result in the message "0 errors, 0 warnings. . ." In WinShell press the PDF button with the magnifying glass to view the result. This will call the result into the PDF reader.

A basic LaTeX document starts with some setup commands and then has the printable portion of your document between `\begin{document}` and `\end{document}`. It is good form to keep most of your setup commands in a common preamble file which you can use for different documents. So your file looks like,

```
[setup commands]

```

test.tex includes some random typing and a couple derivations. There are some independent packages for derivations. I use a modified “table” environment; the commands for this are explained in comments from the preamble file.

This might give you a sample of what LaTeX can do. You can get all sorts of LaTeX help on the web. However, if you decide to go forward with LaTeX, [Guide to LaTeX](#) is a good place to start. There are a number of good resources at Peter Smith’s [Latex for Logicians](#).