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This is a sample file for the text formatter LaTeX. I require you to use LaTeX for the following reasons:

- It produces the best output of text, figures, and equations of any program I have seen.
- It is machine-independent. You can e-mail ASCII versions of most relevant files.
- It is the tool of choice for many research scientists and engineers. Many journals accept LaTeX submissions, and many books are written in LaTeX.

Some basic instructions are given below. Put your text in here. You can be a little sloppy about spacing. It adjusts the text to look good. You can make the text smaller. ^{You can make the text tiny.} Skip a line for a new paragraph.

You can use italics (*e.g. Math is everywhere*) or **bold**. Greek letters are a snap: Ψ, ψ, Φ, ϕ. Equations within text are easy— The equation of a straight line is $y = mx + b$. You can also set aside equations like so:

$$\nabla^T \cdot \mathbf{v} = 0, \tag{1}$$

$$\frac{dT_n}{dt} = \sum_{n=1}^{N} \left(-\mu - n^2\pi^2\right) T_n(t). \tag{2}$$

References[1] are available. If you have a postscript file, say `sample.figure.eps`, in the same local directory, you can insert the file as a figure. Figure 1, below, gives plots of various Bessel functions.

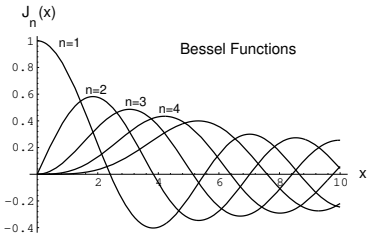

Figure 1: Sample figure plotting Bessel functions

Running LaTeX

A very good and modern option is the web-based `https://www.overleaf.com`. Or you can create a LaTeX file with any text editor (`vi, emacs, gedit`, etc.). To produce a document, you need to run the LaTeX application on the text file. The text file must have the suffix "`.tex`" On the Linux system this is done via the command

```
latex2pdf file.tex
```

This generates the file `file.pdf`.

Alternatively you can use `TeXShop` on a Macintosh or `MiKTeX` on a Windows-based machine. The `.tex` file must have a closing statement as below.

[1] Lamport, L., 1986, *LaTeX: User's Guide & Reference Manual*, Addison-Wesley: Reading, Massachusetts.