LaTeX

lay-teck

Some Guy

Linux@APP

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What is LaTeX?

LaTeX is a typesetting system, desgned to prevent the document writer from screwing everything up. Latex is acutaly a collection of macros built ontop of TeX to make it useable for document writers, LaTeX. Instead of visually formatting your text, you enter your document text intertwined with LaTeX commands in a text file. You then run TeX to produce formatted output, such as a PDF file. Thus, in contrast to standard word processors, your document is a separate file that does not pretend to be a representation of the final typeset output, and so can be easily edited and manipulated.

Types of documents.

article: For articles in scientific journals, presentations, short reports, program documentation, invitations, ...

report: For longer reports containing several chapters, small books, thesis.

book: For real books.

memoir: It is based on the book class, but it contains lots of packages not imported by default.

letter: For writing letters.

beamer: For writing presentations (like this beamer).

A frame

LaTeX or \LaTeX

```
\begin{verbatim}              \section{Section}
\documentclass{article}       Hello World!
\title{A paper on how to      \subsection{Subsection}
write papers.}                Stucturing a document is easy!
\date{2018-02-22}             \subsubsection{Subsubsection}
\author{Andrew Pobrica}       More text.
\begin{document}              \paragraph{Paragraph}
\maketitle                    Some more text.
\pagenumbering{gobble}        \subparagraph{Subparagraph}
\newpage                          Even more text.
\tableofcontents              \section{Another section}
\newpage                      \end{document}
\pagenumbering{arabic}        \end{verbatim}
```

```python
#Leibniz formula

pi = 0
x = 0
iterations = 10000
try:
        for x in range(iterations):
                pi = pi + 2 / ((4*x+1) * (4*x+3))
        print(pi*4)

except KeyboardInterrupt:
        print(x)
        print(pi*4)
```

$$\sin A \cos B = \frac{1}{2}\left[\sin(A+B) + \sin(A+B)\right]$$
$$\sin A \sin B = \frac{1}{2}\left[\sin(A+B) - \cos(A+B)\right]$$
$$\cos A \cos B = \frac{1}{2}\left[\cos(A+B) + \cos(A+B)\right]$$

```
tlmgr update –list
tlmgr update –self
tlmgr update –all
tlmgr uninstall
```


Fig. 1: I got this off of reddit.

```
 _____
/ What I tell you three times is true. \
|                                       |
\ -- Lewis Carroll                      /
 ---------------------------------------
        \   ^__^
         \  (oo)_____
            (__)\       )\/\
                ||----w |
                ||     ||
```

`\LaTeX`