Introduction to LaTeX

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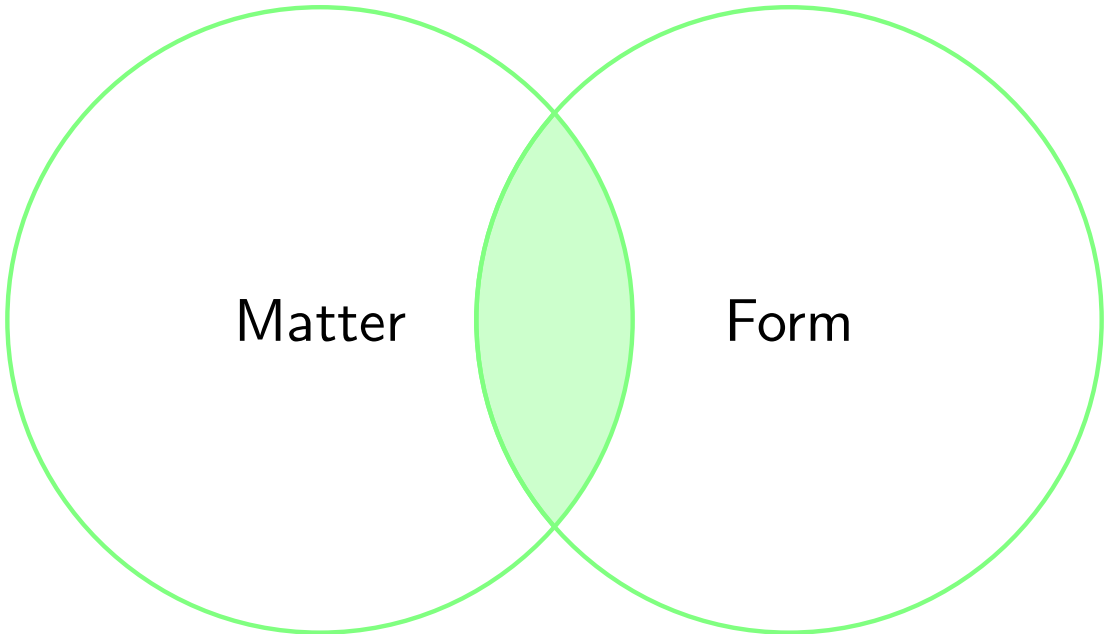

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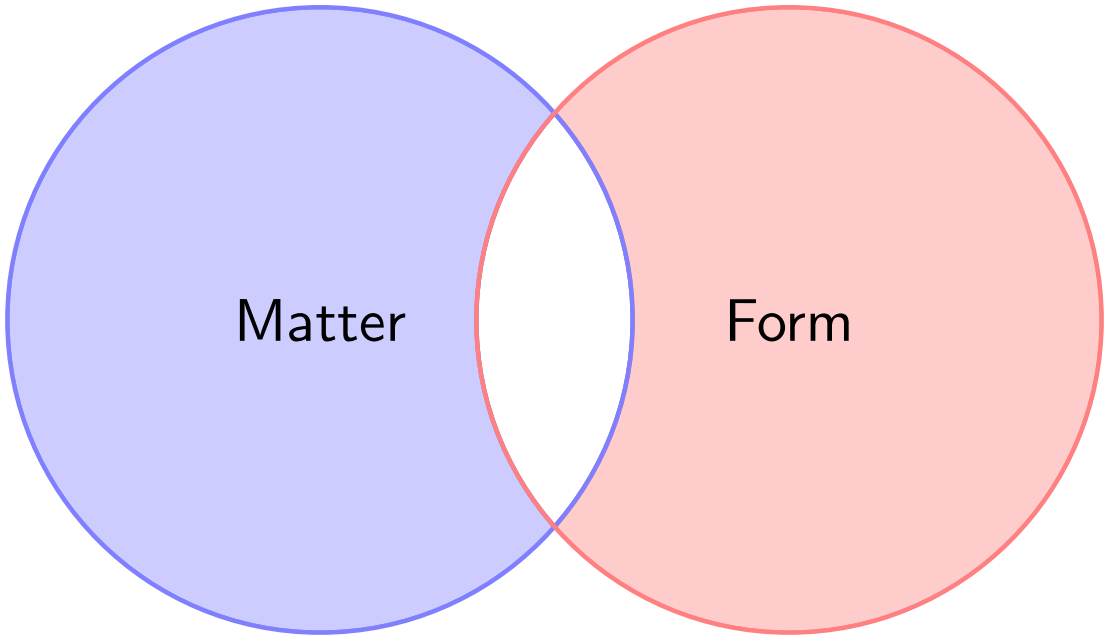

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Unlike WYSIWYG softwares like MS Word and Open Office, LaTeX seperates the process of typesetting from the process of inserting content.

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- In computer-science-y terms, TeX is a *macroprocessor*.

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- This is the role that "markup" plays.

How do I use LaTeX?

- A LaTeX file or source code is always a plaintext file, that is processed by a TeX engine.
- This is one of the most important features of LaTeX as it frees the user using a particular version or text editor.

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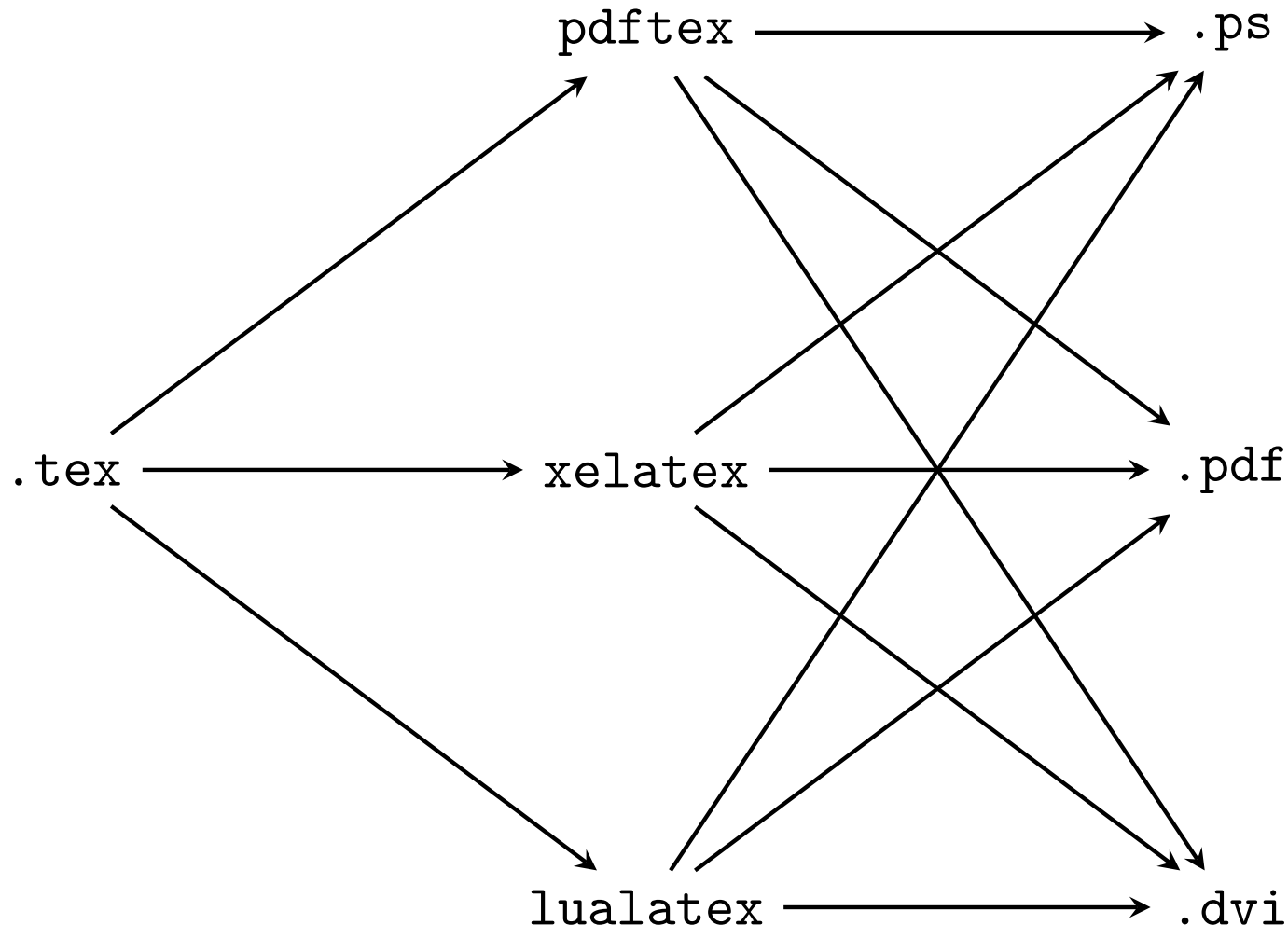

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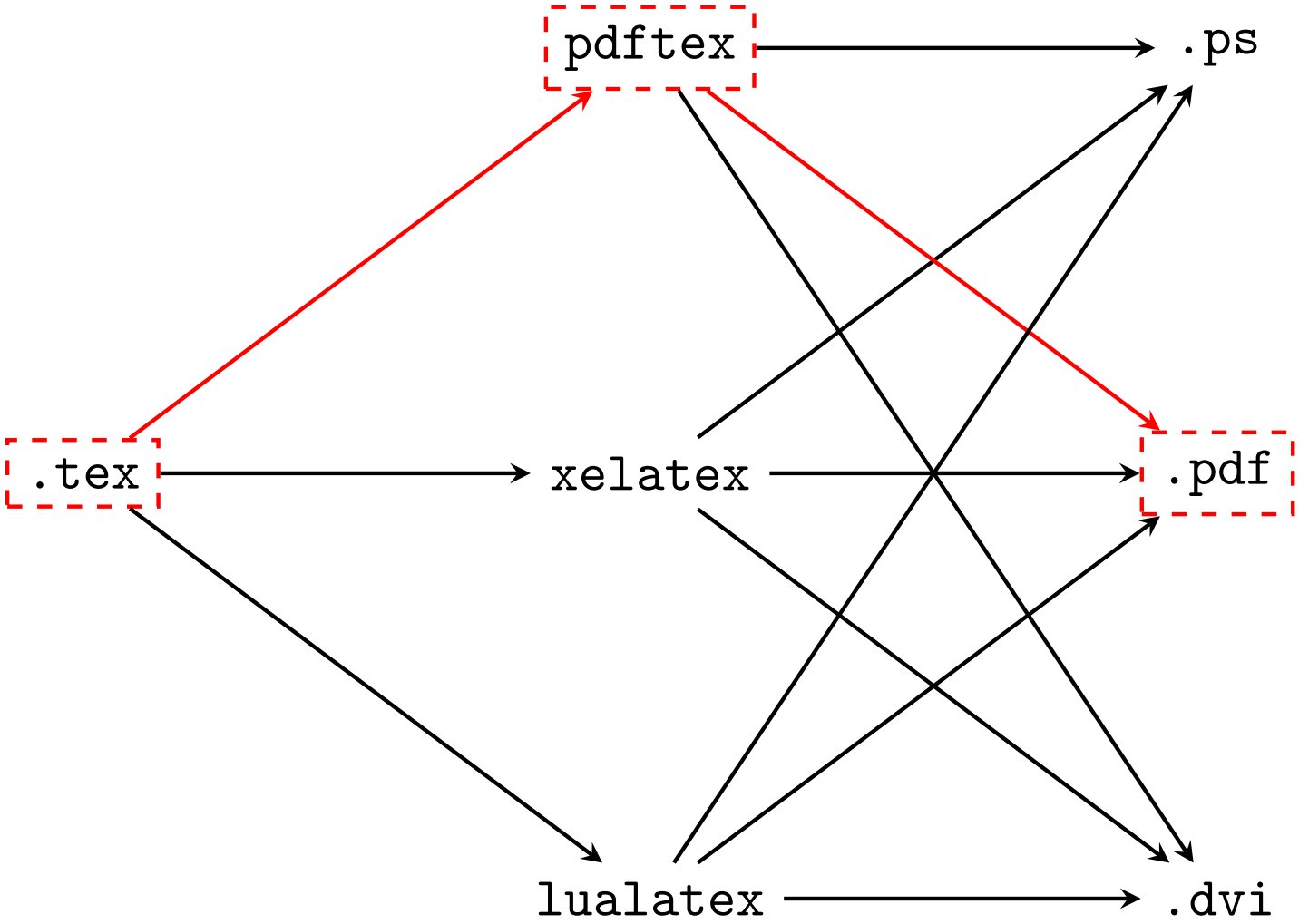

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- and, a few more...

Structure of LaTeX source file.

```
1  \documentclass{article}
2
3  \usepackage{hyperref}
4
5  \title{A critical analysis of Naruto: the Manga}
6  \author{Tejas Sanap}
7
8  \begin{document}
9          \maketitle
10
11 \end{document}
```

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- Environments puts its contents inside a TEX group.
- And, prevents commands from leaking out.
- Enviroments restrict their effects to their own contents.

Environments

Example:

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\begin{center}
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A few of the most common environments we see are:

- `document`.
- `figure`.
- `align`.
- `table`.

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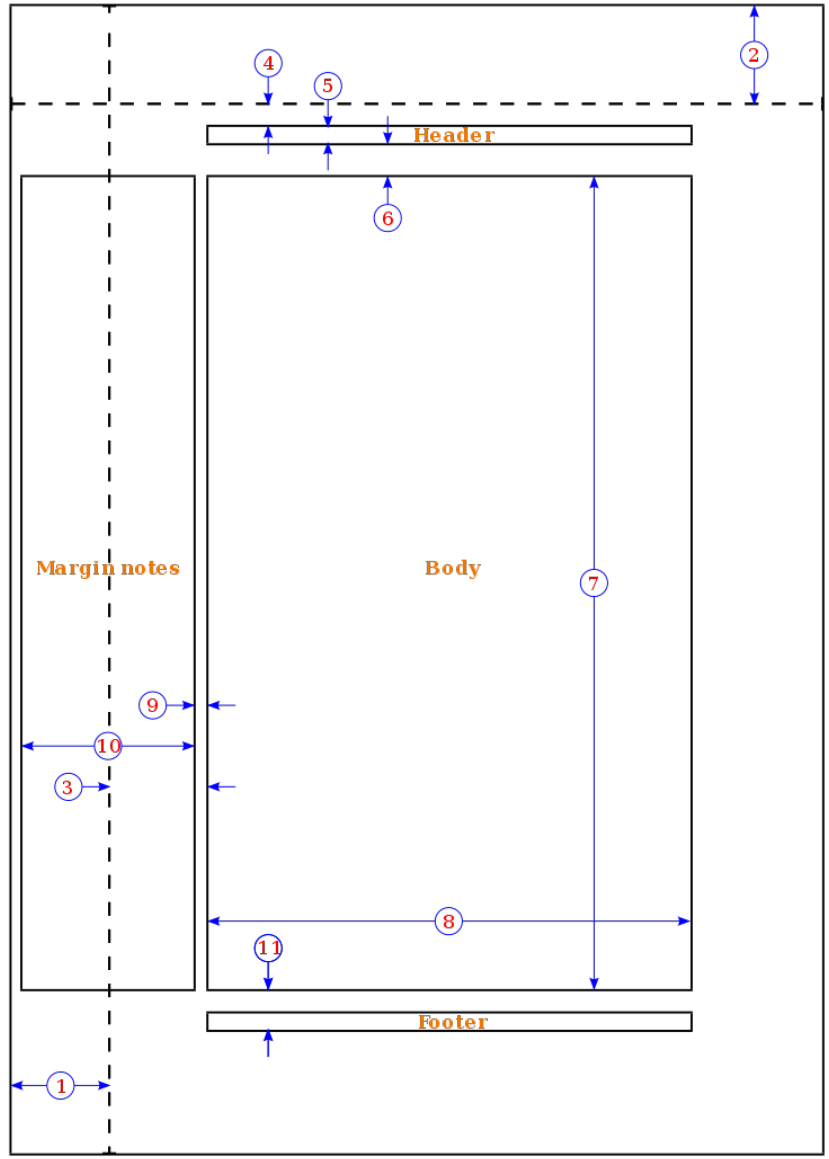
- By default, LaTeX identifies tables and figures as floats.
- The tricky part, is to figure out how to place/position floats.
- LaTeX automatically moves floats across pages depending on how much space is left.

Page Geometry

4. \topmargin
7. \textheight
8. \textwidth
11. \footskip



Lengths in LaTeX

`\baselineskip`	Vertical distance between lines in a paragraph
`\columnsep`	Distance between columns
`\columnwidth`	The width of a column
`\evensidemargin`	Margin of even pages, commonly used in two-sided documents such as books
`\linewidth`	Width of the line in the current environment.
`\oddsidemargin`	Margin of odd pages, commonly used in two-sided documents such as books
`\paperwidth`	Width of the page
`\paperheight`	Height of the page
`\parindent`	Paragraph indentation
`\parskip`	Vertical space between paragraphs
`\tabcolsep`	Separation between columns in a table (tabular environment)
`\textheight`	Height of the text area in the page
`\textwidth`	Width of the text area in the page
`\topmargin`	Length of the top margin