

L^AT_EX for Newbies

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1 Introduction

L^AT_EX is a typesetting program used widely in scientific community to prepare documents. It allows the user to typeset their content using tags and formatting commands. There are several features provided by this program, some of them are typesetting, cross-referencing, embedding tables and images inside documents, etc.

1.1 Why L^AT_EX?

A simple question one may ask that why we need yet another document preparation tool when we have so many of them like MS Word already available in the market. The answer to this is that L^AT_EX comes free of cost and the time it takes to prepare a large document is very less. Also using `enable` enables you to have more finer control over the appearance of your document.

2 Getting Started

There are some simple steps you need to follow in order to get started. It is assumed that you are trying to prepare your document on a linux system. The steps are:

1. Open an editor of your choice(Kile or Vim).
2. Write the following commands as shown in the figure 1
3. Save the file with a `.tex` extension.
4. Type the command `pdflatex` at your terminal.

5. A pdf will be generated in the same folder as your .tex file.

```
\documentclass{article}
\title{My Title}
\Author{My Name}
\begin{document}
Hello world. This is my first document.
\end{document}
```

Figure 1: A Simple L^AT_EX Document

In the above example

`\documentclass`, `\begin`, etc.

are the commands and everything inside `{..}` are the arguments to the command. this document will cover brief description of the commands and their usage.

3 Document Types

L^AT_EX documents starts with `\documentclass{class}` and end with `\end{document}`. Some of the well known and widely used classes are as given in table below.

Table 1: Document class

Class	Description
article	for articles in scientific journals, presentations, short reports, program documentations,...
report	for longer reports containing several chapters, small books, thesis, ...
book	for real books
slides	for slides
letter	for writting letters.

4 Inserting Pictures

To insert a picture in your document use `\begin{figure}` and `\end{figure}`. An example for this is shown below in figure2.

```

\documentclass{article}
\title{My Title}
\Author{My Name}
\begin{document}
  \begin{figure}
    \includegraphics[width=7cm, height=2cm]{screen/shot1}
    \caption{A screenshot}
  \end{figure}
\end{document}

```

Figure 2: Basic commands for figure

Also note that you should include the package `\usepackage{graphics}`, `\usepackage{graphicx}` at the beginning of your document.

5 Working with Tables

If you want a table in your document then you need to use `\begin{tabular}` and `\end{tabular}` commands. A sample code is shown below in figure3.

```

\begin{tabular} {|c|l|}
\hline
{\bf Header1} & {\bf Header2} \\
\hline
A & Description1 \\
\hline
B & Description2 \\
\hline
C & Description3 \\
\hline
\end{tabular}

```

Figure 3: Basic commands for table