

L^AT_EX Cheatsheet

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A latex cheatsheet.

1 Characters

1.1 Latex command characters

`$ % & # - { } \ ~ ^` are command characters and has special meaning to latex.

2 Writing

2.1 Modes in L^AT_EX

Paragraph mode Normal mode

Math Mode For mathematical equation. Text inside `\(...\)` or `$...$` or

`$$...$$` or `\begin{equation}...\end{equation}` or `\begin{displaymath}...\end{displaymath}`

Left to right mode Text are displayed from left to right without line breaks. text inside `\mbox{}`

2.2 Creating a New Paragraph

A blank line creates a new paragraph.

2.3 Spaces

2.3.1 Inserting Spaces

`\,` is used for inserting a space.

2.3.2 Space after a period

Latex assumes end of sentence if it found period after small case later. In that case it puts extra space after period. But for the cases like “etc.” a space followed by \ should be used after period like `etc.\` . A space followed by \ means inter word space.

If ending of a sentence contains a uppercase letter to end the sentence use \@ before period.

2.3.3 Space after a latex command

All spaces are ignored after a latex command like `\LaTeX` command. To make a space after `\LaTeX` a space followed by \ should be used like `\LaTeX`

2.4 Dashes

- - A intra-word dash or hyphene. Example: X-ray.
- -- A number range dash. Example: 1–10
- --- A punctuation dash. Example: —

2.5 Quotations

‘ is used for single quotation start (‘).
’ is used for single quotation end (’).
“ is used for double quotation start (“).
” is used for double quotation end (”).

2.5.1 Putting Quotation in a Quotation

`“\, ‘Ah! ‘\, ‘ ‘ She said` produces “ ‘Ah!’ ” She said

2.6 Commenting

% is used for commenting. Latex ignore all character after % to the end of the line. Also ignores space in the beginig of the next line.

3 \LaTeX Commands List

- `\documentclass[]{} —` To specify document type. Arguments can be book, article, report etc. Options¹ are:
 1. 11pt — 10% larger than 10pt.
 2. 12pt — 20% larger than 10pt.
 3. twoside — to print in both sides.
 4. twocolumn — two column in a single page.
- `\usepackage{}` — To use external packages.
- `\title{}` — To specify document title.
- `\author{}` — To specify document author. Multiple authors can be specified using `\and` command.
- `\begin{}` — To begin any block. like `\begin{document}` to begin any document, `\begin{quote}` begins a long quotation, `\begin{math}` begins a math block etc.
- `\end{}` — ends any block that begins with `\begin{}`
- Argument of `\begin` and `\end` are called environments. They create different display environments. Every declaration or command can be environment like `\emph` can also be written as environment like `\begin{emph} ... \end{emph}` Here is a list of different environments:

document Document environment.

quote Short quotation environment.

quotation Long quotation environment.

itemize Unordered list environment.

enumerate Ordered list environment.

description Description list environment like this one.

displaymath Display math equations in separate line but without equation number.

equation Display equation in separate line with equation number for further reference.

¹Options are specified inside the square brackets

- `\maketitle` — To create title. It must be inside `\begin{document}`.
- `\part` — Create parts of a document. Doesn't effect document numbering.
- `\chapter` — Create chapters. No applicable for article document class.
- `\section` — Specify a section.
- `\subsection` — Specify a sub-section of a section.
- `\subsubsection` — Specify a sub-section of a sub-section.
- `\appendix` — Specify an appendix.
- `{ }` — Curly braces can be used for defining scope. Example — Input: Hello, `{\em aagontuk}` Output: Hello, *aagontuk*
- `\today` — Current date November 14, 2018
- `\TeX` — Shows T_EX
- `\LaTeX` — Shows L^AT_EX
- `\ldots` — Produces ...
- `\emph{ }` — To emphasize text. Example: I will *emphasize* it.
- `\mbox{TEXT}` — Never breaks TEXT.
- `\footnote{footnote}` — To create a footnote. Example: Footnote²
- `\\` — New line.
- `*` — New line but prevents a new page.
- `\newline` — New line.
- `\hfill \break` — New line.
- `\newpage` — New Page.
- `\hspace{xmm}` — x mm horizontal space.
- `\vspace{xmm}` — x mm vertical space.

²Please find the footnote here