Introduction to LaTeX

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Topics

- Why LaTeX?
- Preamble
- Text formatting
- Working with images
- Working with lists
- Working with math
- Working with tables
- Working with Beamer
- Working with columns, themes and fonts

Why LaTeX?

- Create professional documents
- Use mathematics symbols
- Create tables
- Create bibliographies

Preamble

- document class
    - **article** - for articles in scientific journals, short reports
    - **report** - for longer reports containing several chapters, thesis
    - **beamer** - for presentations
- title
- author
- date

Text formatting

- **This is a bold text**
- *This is an italicized text*
- <u>This is underlined text</u>
- This is *emphasized* text
- Comments

Working with images

- Package - graphics

Figure : dog

Working with lists

This is an ordered list

1. apple
2. banana
3. mango

This is an unordered list

- cricket
- football
- table tennis

Working with math

- Modes
  - Inline mode - Writing math as part of text like $E = mc^2$
  - Display mode - Writing math which is not part of text like

$$E = mc^2$$

  This prints the expression in a separate line.

- Subscripts like x_1, y_1
- Superscripts like x^2, y^2
- Equations
  - package - amsmath
  - Sample equation

$$(x + y)^2 = x^2 + 2xy + y^2 \qquad (1)$$

Working with tables

- Simple table

alphabets	numbers
a	1
b	2

- Table with borders

alphabets	numbers
a	1
b	2

Working with Beamer

- Adding frames

Working with Beamer

- Adding frames
- Adding effects to presentation

Working with Beamer

- Adding frames
- Adding effects to presentation
- Highlighting important data

This is a block

This is an alert block

Examples

This is an example block

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Examples

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Working with columns, themes and fonts

Different Themes
- Berkeley
- Copenhagen
- Madrid

Different colorthemes
- beaver
- beetle
- seahorse

Working with fonts
- structurebold
- structuresmallcapsserif