

# LaTeX

What is it?, Who is it for?

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# Outline

- Introduction
- Who is it for?
- Who is it not for?
- Why LaTeX?
- TeX and LaTeX
- What you need to get things started ...

# Introduction

- Type setting program/software,
- Used for creating technical and scientific documents,
- Can be used to write papers, journals, articles, reports, manuscripts, books, presentations ...
- Free, Open Source and Cross-Platform

# Who is it for?

- Science and Mathematical Students,
- Researchers, Professors,
- People planning to write to technical and scientific journals,

Why?

- Programming based,
- Only simple formatting options,
- No mouse based features,

# Who is it not for?

- Normal students and teachers,
- General public, (Non-Scientific Community)
- Office works, (Depends),
- Who does not know programming.

# Why LaTeX?

- Strict control of formatting,
- Dynamic arrangements of pictures, tables and paragraphs,
- Easy to write mathematical contents and equations,
- Auto numbering of pages, figures, tables, equations, sections, subsections, etc.,
- Easy to cross-reference, take care of bibliography entries etc.,
- Works the same while switching platforms,
- Memory-wise efficient,
- What you see is what you get output.

# TeX and LaTeX

- TeX is the compiler. Codes for converting the contents into proper typed contents.
- Created by Donald Knuth.
- LaTeX is an advancement on TeX. It is TeX + a lot of features. Much Easier to operate.
- Created by Leslie Lamport.
- TeX is the core of LaTeX.

# What you need to start with?

- A LaTeX compiler.
  - MiKTeX – Windows
  - MacTeX – Mac
  - TeX-live – Linux
- An Editor.
  - Texmaker, Texstudio, Kile, TeXnic Centre (Full Fledged)
  - Geany, gedit, notepad etc., (You need a shell)
- A Shell.
- A pdf viewer.
  - Adobe reader, Sumatra, or any reader
- A ghost script viewer (Optional)



# What we will see,

- Tex-live packages,
- How to install MiKTeX,
- How to install TeXMaker and TeXstudio,