



剑桥中国学生学者联谊会
Chinese Students and Scholars Association in Cambridge

How to use \LaTeX : A gentle walk into the world of typesetting

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July, 2022

Why \LaTeX ?

An extremely good philosophical question.

- ▶ Microsoft Office Word and PowerPoint are boring, because they literally are.
- ▶ \LaTeX is elegant, charming, or whatever...
- ▶ Excellent for mathematical typesetting (you can even use \LaTeX in Word!).
- ▶ Powerful, lots and lots of functionalities for you to discover and extend. Be it theses, papers, slides (using Beamer), spreadsheets... Your imagination is the only limitation (apart from time...).
- ▶ Free and portable, supported by most OS platforms.

What L^AT_EX can do

- ▶ Write scientific papers
- ▶ Write theses
- ▶ Typeset books and publications
- ▶ Write typeset letters
- ▶ Play around with mathematical formulae
- ▶ Make presentation slides
- ▶ Beautify your CV
- ▶ and many more

Useful resources

Books list

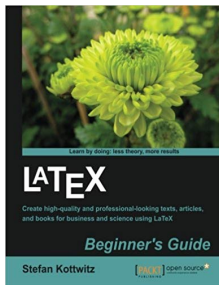


Figure 1: L^AT_EX Beginner's Guide

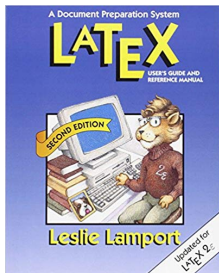


Figure 2: L^AT_EX: A Document Preparation System: User's Guide and Reference Manual

Useful resources

Learn \LaTeX in one video :

<https://www.youtube.com/watch?v=VhmkLrOjLsw>

Overleaf: <https://www.overleaf.com>

The easy to use, online, collaborative editor. Templates and tutorials are available.

A brief history

In the mid 1970s, Donald Knuth, a Stanford CS geek and the academic world equivalent of Martin (the author of GOT), developed $\text{T}_{\text{E}}\text{X}$ in SAIL to typeset his "The Art of Computer Programming" (TAOCP). First public release in 1978. He reimplemented it in Pascal in the mid 80s (WEB, literate programming). Leslie Lamport, the genius, wrote \LaTeX in early 80s by porting the original $\text{T}_{\text{E}}\text{X}$.

Q: What is the relationship between $\text{T}_{\text{E}}\text{X}$ and \LaTeX ?

\LaTeX uses the $\text{T}_{\text{E}}\text{X}$ typesetting programme to compile and generate its output. \LaTeX focuses on the content while $\text{T}_{\text{E}}\text{X}$ is the main programme for setting up the layout.

\LaTeX version and more

The first \LaTeX version available is 2.09 (strange number and strange version control). Later in 1994, $\text{\LaTeX} 2_{\epsilon}$ replaced the old version, and remained ever since.

\LaTeX 3 is a long-term research project, which started from the 1990s.

\LaTeX , unlike Microsoft Office Word, is not **WYSIWYG** (what you see is what you get), and it allows the user to focus on the content and structure of the text. Lots of strange syntax and commands are present in the \LaTeX source file.

How to pronounce L^AT_EX ?

First and foremost, the pronunciation of L^AT_EX. According to the father of T_EX¹:

'English words like 'technology' stem from a Greek root beginning with the letters τεχ...; and this same Greek word means art as well as technology. Hence the name TeX, which is an uppercase form of τεχ.

Insiders pronounce the χ of TeX as a Greek chi, not as an 'x', so that TeX rhymes with the word blecchhh. It's the 'ch' sound in Scottish words like loch or German words like ach; it's a Spanish 'j' and a Russian 'kh'. When you say it correctly to your computer, the terminal may become slightly moist.'

Donald Knuth

¹This frame here uses the *aquote* package

How to pronounce \LaTeX ?

Another quote from the father of \LaTeX ²:

'One of the hardest things about LaTeX is deciding how to pronounce it. This is also one of the few things I'm not going to tell you about LaTeX, since pronunciation is best determined by usage, not fiat. TeX is usually pronounced teck, making lah-teck, and lay-teck the logical choices; but language is not always logical, so lay-tecks is also possible.' Leslie Lamport

²This frame here uses the *aquote* package

Installation

I would highly recommend the following \LaTeX distributions (or platforms).

- ▶ For Windows users
 - ▶ TeX Live
 - ▶ MiKTeX
- ▶ For MacOS users
 - ▶ TeX Live
 - ▶ MacTeX
- ▶ For web-based users
 - ▶ Overleaf

Note that the TeX Live distribution contains yearly updates, and the update installation must be done manually.

Editors

There are in fact numerous ways for you to write up a \LaTeX document.

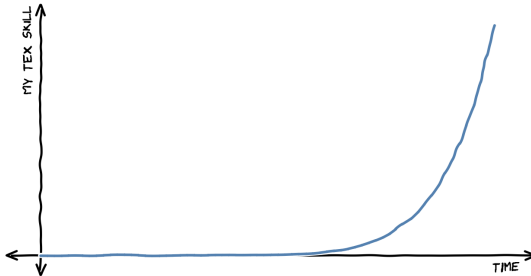
- ▶ TeXStudio (one that I am using to build the beamer slides)
- ▶ TeXShop
- ▶ Notepad / Notepad++
- ▶ Sublime
- ▶ Visual Studio Code
- ▶ Vi / Vim
- ▶ *Word* !!!
- ▶ Overleaf (the online editor)

In fact, any plain-text editor shall suffice.

How to use

We have to remind you that learning \LaTeX is (*or might be*) very hard ³

THE ULTIMATE TEX LEARNING CURVE
CREDIT: YOUCHAO



How to use

We have to remind you that learning \LaTeX is *(or might be) very hard* ⁴

Newbie

Give up

Master

USUALLY

WANT THIS



⁴These arrows are plotted using a package called *tikz*

Some common knowledge

- ▶ Since \LaTeX is a package implemented in the \TeX **typesetting language**, we should consider the \TeX input syntax when use it.
- ▶ Being able to use style files and packages/environments properly is the key to success. Use Google when uncertain.
- ▶ \TeX reads *.tex files, and with lots of interesting background procedures outputs *.pdf files.

Some common knowledge

- ▶ The effect of typing multiple spaces is the same as one space.
- ▶ The effect of typing multiple line feeds is the same as a one-line break.
- ▶ If you don't know how and when to use \ (backslash), **then you need to know how and when to use it.**
- ▶ Be aware of the use of \xspace and whatever that follows the backslash after the ~mark, e.g., ~\ref⁵.
- ▶ \ (white space), this forces normal space, \@, this indicates that the next punctuation ends the sentence. Try out the differences by yourselves.

⁵I personally prefer to use ~\ref, ~\cite, etc., since doing so will force the symbols that follow not start a new line when required

Some common knowledge

- ▶ Special meta characters as part of the T_EX language syntax:

- ▶ # \$ % ^ & _ { } ~ \

- ▶ To use them you have to do the following

- `\# \ $ \% \^ \& _ \{ \} \textasciitilde \textbackslash`

Changing fonts and styles

You may either use (1) lexical declarations or (2) commands. *Contents are referenced from the slides for a course held at the Computer Lab, Cambridge.*

`\mdseries`

`\textmd{text}`

Medium series

`\bfseries`

`\textbf{text}`

Boldface series

`\rmfamily`

`\textrm{text}`

Roman family

`\sffamily`

`\textsf{text}`

Sans-serif family

`\ttfamily`

`\texttt{text}`

Typewriter family

`\upshape`

`\textup{text}`

Upright shape

`\itshape`

`\textit{text}`

Italic shape

`\slshape`

`\textsl{text}`

Slanted shape

`\scshape`

`\textsc{text}`

SMALL CAPS SHAPE

`\normalfont`

`\textnormal{text}`

Normal style

Changing fonts and styles

In order to properly apply the font and style settings to your text, you will need to use curly braces { and } for grouping.

- ▶ Using the commands and macros grouped by the curly braces.

E.g.

This is to demonstrate the `\textbf {bold}` statement.

This is to demonstrate the **bold** statement.

- ▶ Setting up the lexical scope using the curly braces.

E.g.

This is to demonstrate the `{\bfseries bold}` statement.

This is to demonstrate the **bold** statement.

How to use dashes

There are, in fact, **en dashes**, **em dashes**, **hyphens** and **minus signs**.

- corresponds to - hyphen
- corresponds to – en dash
- corresponds to — em dash
- \$-\$ corresponds to – minus sign

For example, line-breaks (*hyphen*), Figures 1–4 (*en dash*), people—like me—love to use \LaTeX (*em dash*).

In terms of how to properly use them, try searching the internet for answers. **Metaphysics** it is.

How to use quotation marks

One of the (out of the many) mistakes that you will definitely make throughout your \LaTeX journey is the use of quotation marks. Unlike Word, \TeX uses single quotation mark (') and the grave accent (') to encode the differences.

- ' corresponds to ' left quote
- ` corresponds to ' right quote
- ' ' corresponds to " left double
- ` ` corresponds to " right double

Surviving from using tables

Tables! Many have tried to survive, many then failed.

In general, there are:

- ▶ the normal table, `\table` (then `\tabular`),
- ▶ the table that can span over several pages, `\longtable`

A word of caution

If you do not put theory into practice, you shall never be able to master L^AT_EX.⁶

⁶An infamous quote from Youchao Wang

Starting a report and title page

```
1 \documentclass{article}
2 \begin{document}
3 \begin{titlepage}
4   \begin{center}
5     \line(1,0){300}\\
6     [0.25in]
7     \huge{\textbf{ CSSA \LaTeX\ Notes
8       }}\\
9     [2mm]
10    \line(1,0){200}\\
11    [1.5cm]
12    \textsc{\LARGE University of
13      Cambridge}\\
14    \textsc{\LARGE Using \LaTeX\ to
15      Write a Simple Report}\\
16    [8cm]
17    \end{center}
18    \begin{flushright}
19      \textsc{\large CSSA. \A Latex
20        User\\
21        20th Apr 2019}
22    \end{flushright}
23  \end{titlepage}
24 \end{document}
```

CSSA ~~La~~TeX Notes

UNIVERSITY OF CAMBRIDGE
USING ~~La~~TeX TO WRITE A SIMPLE REPORT

CSSA.
A LATEX USER
20TH APR 2019

Sections

```
1 \section{Introduction}
2 This is the first line of the report.
   This report will show you how to
   use \LaTeX\\
3 % Text holder: show one paragraph of
   \lipsum
4 \lipsum[1]
5 % Text holder: show one paragraph of
   \lipsum
6 \section{Second section}
7 This is the second section of this
   report.
8 \subsection{Sub section 1}
9 This is the first sub section in this
   report.
10 \subsection{Sub section 2}
11 This is the second sub section in this
   report.
12 \subsection{Sub sub section}
13 This is a sub sub section. Replace
   text here when you write your
   report.
```

1 Introduction

This is the first line of the report. This report will show you how to use \LaTeX . Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut parum elit, vestibulum ut, placerat ac, adipiscing vitae, fides. Curabitur uterque gravida mauris. Nam arcu libero, nuncius eget, consectetur id, volutate a, nunc. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Maecenas ut leo. Cras viverra metus rhoncus enim. Nunc et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, peritum quis, viverra ac, nunc. Praesent eget sem vel leo ultrices lobortis. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget eros. Donec nibh mi, nuncquis eu, accumsan-dignissim, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

2 Second section

This is the second section of this report.

2.1 Sub section 1

This is the first sub section in this report.

2.2 Sub section 2

This is the second sub section in this report.

2.2.1 Sub sub section

This is a sub sub section. Replace text here when you write your report.

Margins, page number

```
1 \documentclass{article}
2 \usepackage{lipsum}
3 % geometry package, control the margin
  of the article
4 \usepackage[margin = 1 in, left = 1.5
  in, includefoot]{geometry}
5 % Header and Footer Stuff
6 \usepackage{fancyhdr} % fancyhdr
  package
7 \pagestyle{fancy}
8 % Clear previous head and foot style
9 \fancyhead{}
10 \fancyfoot{}
11 % Position the page number RHS of the
  footer
12 \fancyfoot[R]{ \thepage \ }
13 % Clear the header line
14 \renewcommand{\headrulewidth}{0pt}
15 % Keep the footer line
16 \renewcommand{\footrulewidth}{1pt}
```

1 Introduction

This is the first line of the report. This report will show you how to use `lATEX`. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut porta elit, vestibulum ut, placerat ac, adipiscing elit, id. Cras bibendum magna. Nam arcu libero, nuncius eget, consetetur et, vulputate a, magna. Donec vel porta augue eu nunc. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Maecan et leo. Cras viverra, nunc dui convallis. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus et amet tortor gravida placerat. Integer sapien est, laoreet la, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices lobortis. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, nulla ac, nulla. Cras bibendum augue nulla. Donec varius arcu eget risus. Duis nulla mi, congue eu, accumsan dui, sagittis quis, diam. Duis eget arcu sit amet vari dipulvis rutrum.

2 Second section

This is the second section of this report.

2.1 Sub section 1

This is the first sub-section in this report.

2.2 Sub section 2

This is the second subsection in this report.

2.2.1 Sub-sub section

This is a sub-sub-section. Replace text here when you write your report.

Lists

```
1 % Normal bullet point: itemized
2 \begin{itemize}
3   \item This is our first line
4   \item This is our second line and I
      am making it longer so that you
      can see how text wraps around
      automatically in \LaTeX
5 \end{itemize}
6 \item A bullet within a bullet!
7 \begin{itemize}
8   \item More deeper
9 \end{itemize}
10 \end{itemize}
11 \item [Title] blah blah blah
12 \item [This is a longer title] blah
    blah blah
13 \begin{enumerate}
14   % Numberd lists
15   \item \lipsum[1]
16   % Just trying to make the PDF look
      okay for this presentation
17   \item \lipsum[2]
18 \end{enumerate}
19 \end{itemize}
```

3 Lists

- This is our first line
- This is our second line and I am making it longer so that you can see how text wraps around automatically in `\LaTeX`
 - A bullet within a bullet!
 - More deeper

Title blah blah blah

This is a longer title blah blah blah

1. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut parva est, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam nec litora, accumsan eget, convallis ut, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Maecenas ut leo. Cras viverra metus rhoncus quam. Suspendisse posuere magna mollis euismod. Praesent eu tellus sit amet turpis elementum ultricies. Pellentesque odio odio, tincidunt in, laoreet enim, ullamcorper eu, felis. Aenean sit amet justo. Morbi neque dolor, egestas ac, iaculis ac, nulla. Vivamus vestibulum sagittis sapien. Sed non lectus. Donec quam felis, euismod eget, ornare sed, luctus nec, molestie sed, justo. Pellentesque dolor lorem at neque. Mauris enim, vitae, a, magna ut, tellus. Pellentesque auctor orci. Aliquam tincidunt urna. Nulla ullamcorper vestibulum tristique. Pellentesque cursus lectus mauris.
2. Nam dei ligula, Egestas a, euismod sedibus, sedibus vol, vol. Mauris auctor lorem non justo. Nam litora litora, pretium et, litora litora, ultricies et, tellus. Donec aliquet, turpis sed accumsan litora, erat ligula aliquet magna, vitae ornare odio metus a mi. Mauris ac orci et nisl hendrerit nulla. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cras nulla est, pellentesque ullamcorper sit amet ligula neque. Pellentesque auctor orci. Aliquam tincidunt urna. Nulla ullamcorper vestibulum tristique. Pellentesque cursus lectus mauris.

Figures and tables

```
1 \usepackage{graphicx}% Import images
2 \usepackage{float} % Control float
```

```
1 \section{Figures and Tables}
2 \subsection{Figures}
3 \begin{figure}[H]
4 \centering
5 \includegraphics[width = \textwidth]{Figures/space.png}
6 \caption{My desktop background}
7 \label{fig}
8 \end{figure}
9 \subsection{Tables}
10 \begin{table}[H]
11 \centering \label{tab}
12 \caption{This is a very simple table}
13 \begin{tabular}{l | c r}
14 Name & University & Department \\
15 \hline
16 CSSA & Cambridge & Engineering \\
17 \end{tabular}
18 \end{table}
19 Figure~\ref{fig}. Table~\ref{tab}.
```

4 Figures and Tables

4.1 Figures



Figure 1: My desktop background

4.2 Tables

Table 1: This is a very simple table

Name	University	Department
CSSA	Cambridge	Engineering

Figure 1: Table 1.

Math equations

```

1 \section{Math equation}
2 Fractions, inline equation: $d = v_{it}
   + \frac{1}{2} \cdot \text{at}^2$\\
3 Brackets:
4 $$\left(\frac{1}{2}\right) \cdot 2 =
   1$$
5 $$\left|-7\right| = 7$$
6 $$x^{2^3}$$
7 \begin{eqnarray*}
8 \quad \sqrt{4} \quad & \neq & 5 \\
9 \quad \pi & \approx & 3 \\
10 \quad \pi & \times & \sqrt{4} < 15
11 \end{eqnarray*}
12 \begin{equation}
13 \quad U(\alpha, \beta) = \frac{e^{jkz}}{\lambda^2} \int_0^{\lambda^2} \int_0^{\lambda^2} U(x,y)
   e^{jk(x^2+y^2)} \frac{dx dy}{\lambda^2}
14 \quad \label{eq:Fresnel}
15 \end{equation}

```

5 Math equation

Fractions, inline equation: $d = v_{it} + \frac{1}{2} \cdot \text{at}^2$

Brackets:

$$\left(\frac{1}{2}\right) \cdot 2 = 1$$

$$|-7| = 7$$

$$x^{2^3}$$

$$\sqrt{4} \neq 5$$

$$\pi \approx 3$$

$$\pi \times \sqrt{4} < 15$$

$$U(\alpha, \beta) = \frac{e^{jkz}}{\lambda^2} \iint_0^{\lambda^2} U(x, y) e^{jk(x^2 + y^2)} \frac{dx dy}{\lambda^2} \quad (1)$$

References: set up

- ▶ LHS: Journal paper
- ▶ RHS: Conference paper

```
1 @article{GaborHolography,  
2   author = {D. Gabor},  
3   journal = {Nature},  
4   number = {161},  
5   pages = {777--778},  
6   publisher = {Nature},  
7   title = {A new microscopic principle  
8     },  
9   volume = {161},  
10  month = {May},  
11  year = {1948},  
12  url = {https://www.nature.com/  
13    articles/161777a0},  
14  doi = {https://doi.org  
15    /10.1038/161777a0},  
16 }
```

```
1 @inproceedings{HardReview_84,  
2   author = {M. Lucente and Galyean, T.  
3     A.},  
4   title = {Rendering Interactive  
5     Holographic Images},  
6   booktitle = {Proceedings of the 22Nd  
7     Annual Conference on Computer  
8     Graphics and Interactive  
9     Techniques},  
10  series = {SIGGRAPH '95},  
11  year = {1995},  
12  isbn = {0-89791-701-4},  
13  pages = {387--394},  
14  numpages = {8},  
15  url = {http://doi.acm.org  
16    /10.1145/218380.218490},  
17  doi = {10.1145/218380.218490},  
18  acmid = {218490},  
19  publisher = {ACM},  
20  address = {New York, NY, USA},  
21 }
```

References: use

```
1 % Reference setup
2 \cleardoublepage
3
4 \section{How to use references}
5 \lipsum[1]
6 \textbf{I'm citing a journal article}
   \cite{GaborHolography}.\
7 \lipsum[2]
8 \textbf{I'm now citing a conference
   article} \cite{HardReview_84}.
9
10
11 \bibliographystyle{IEEEtran}
12 \cleardoublepage
13 \bibliography{References/references.
   bib}
14 \addcontentsline{toc}{section}{
   \numberline{}References}
```

```
1 % .bibtex file
2 use google
```

6 How to use references

Leten ipsum dolor sit amet, consectetur adipiscing elit. Ut porro elit, vestibulum ut, phasellus ac, adipiscing vitae, felis. Cras ultricies dictum gravida mauris. Nam arcu libero, semper eget, convallis ut, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Maecenas ut leo. Cras viverra metus rhoncus enim. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida phasellus. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar et, nulla ac, nulla. Cras ultricies metus neque nulla. Donec varius orci eget tunc. Duis nulla nec, neque eu, accumsan dui, dapibus quis, diam. Duis eget orci sit amet orci dignissim rutrum.

For citing a journal article [1]:

Nam dui ligula, fringilla a, vulputate sodales, efficitur vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a wisi. Morbi ac orci et wisi hendrerit nulla. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum occis anteque praesentibus et augue de parturient montes, nascetur ridicula mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum tristique. Pellentesque cursus lacinia mauris.

For now citing a conference article [2].

References: a word of caution

- ▶ I am personally an old user who prefers to use *bibtex* instead of *biblatex*, simply because: (a) most of my bibliography data-base is built upon *bibtex*, (b) I am **too lazy** to switch.
- ▶ However, if you have just began to use \LaTeX , do practice your use of *biblatex* as it has a rather more modern implementation.
- ▶ In fact, for *bibtex* you would use *BibTeX* as your bibliography tool. Unfortunately, this tool does not support *biblatex*, as it uses *Biber*.

Appendix

```
\cleardoublepage
\appendix
\section{Appendix-1}
This is the first appendix.
\lipsum[1]
\section{Appendix-2}
This is the second appendix.
\begin{figure}[H]
  \begin{subfigure}{0.5 \linewidth}
    \includegraphics[width =
      \textwidth]{Figures/Cubic_
        aperture.png}
    \caption{cubic aperture}
    \label{cubicAperture}
  \end{subfigure}
  \begin{subfigure}{0.5 \linewidth}
    \includegraphics[width =
      \textwidth]{Figures/Circular_
        aperture.png}
    \caption{circular aperture}
    \label{circularAperture}
  \end{subfigure}
  \caption{Two figures}
\end{figure}
```

A Appendix-1

This is the first appendix. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut porce elit, metusibus ut, phasmat se, adipiscing vitae, fides. Crasbitur dictum gravida mauris. Nam acen libero,ummyy eget, consetetur id, vulputate a, magna. Donec volutatis augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac tempus aptent. Mauris ut leo. Cras viverra metus diam aenean. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus in ante tortor gravida placerat. Integer sagittis elit. Suspendisse orn, congue ac, ante. Praesent eget sem vel leo ultrices bibendum. Aenean facilisis. Morbi dolor nulla, malesuada eu, pulvinar at, nulla ac, nulla. Crasbitur auctor oracper nulla. Donec varius orn et orn rime. Duis nulla sed, congue eu, acenamus duisand, sagittis quis, diam. Duis eget orn et orn orn dignissim rutrum.

B Appendix-2

This is the second appendix.



Figure 2: Two figures

Table of contents, list of figures, list of tables

```
1 \end{titlepage}
2 \cleardoublepage
3 % Table of contents stuff
4 \pagenumbering{roman}
5 \tableofcontents
6 % \cleardoublepage
7 % List of figures, list of tables
8 \listoffigures
9 \listoftables
10
11 \thispagestyle{empty}
12 \addcontentsline{toc}{section}{
13     \numberline{}List of Figures}
14 \addcontentsline{toc}{section}{
15     \numberline{}List of Tables}
16 \cleardoublepage
17 % Main body stuff
18 \pagenumbering{arabic}
19 \setcounter{page}{1}
20
21 \cleardoublepage
22 \section{Introduction}
```

Contents	
List of Figures	i
List of Tables	i
1 Introduction	1
2 Second section	1
2.1 Sub-section 1	1
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Templates

I will demonstrate some useful \LaTeX templates, in particular those in Overleaf, as it has become way too popular these days given most people are lazy and not bothered setting up their own development environments.

However, keep in mind that before you use templates, you should make yourself comfortable with the basic \LaTeX commands.

The last session: Q and A

Hopefully, hopefully and hopefully I will be able to answer your questions with my limited years of experience, because \LaTeX is HARD.

Thank you!