

TPT1201
Research Methodology

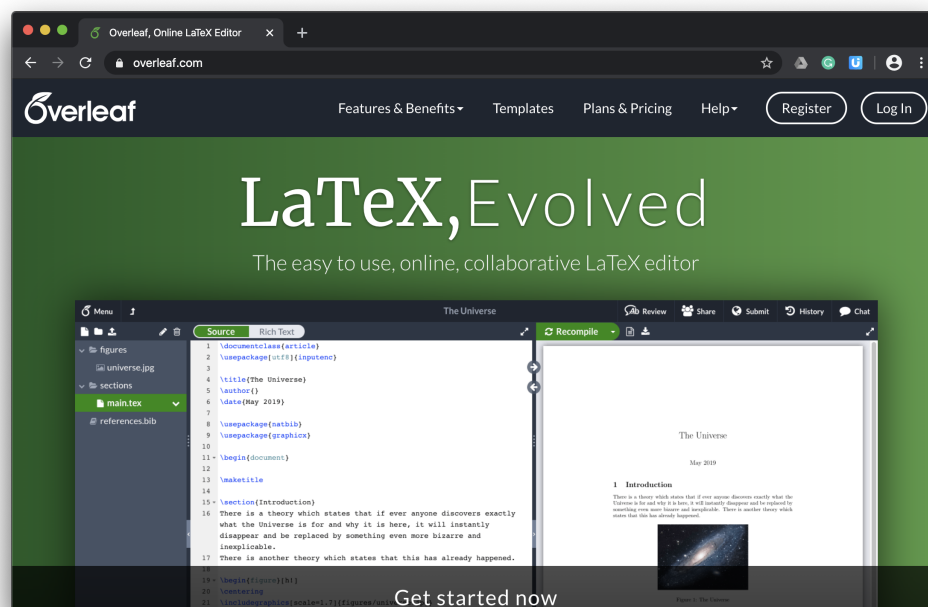
Lab 2

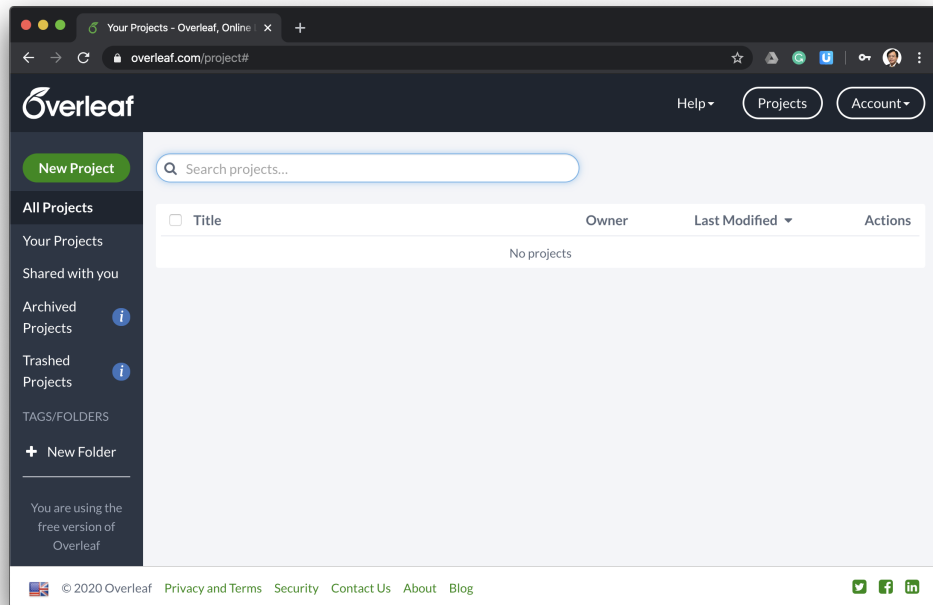
By completing the tutorial, you should be able to:

- use web-based \LaTeX editor
- type text with different fonts and font sizes.
- adjust line spacing in a paragraph
- setting page margin
- share the \LaTeX document

Exercise 1

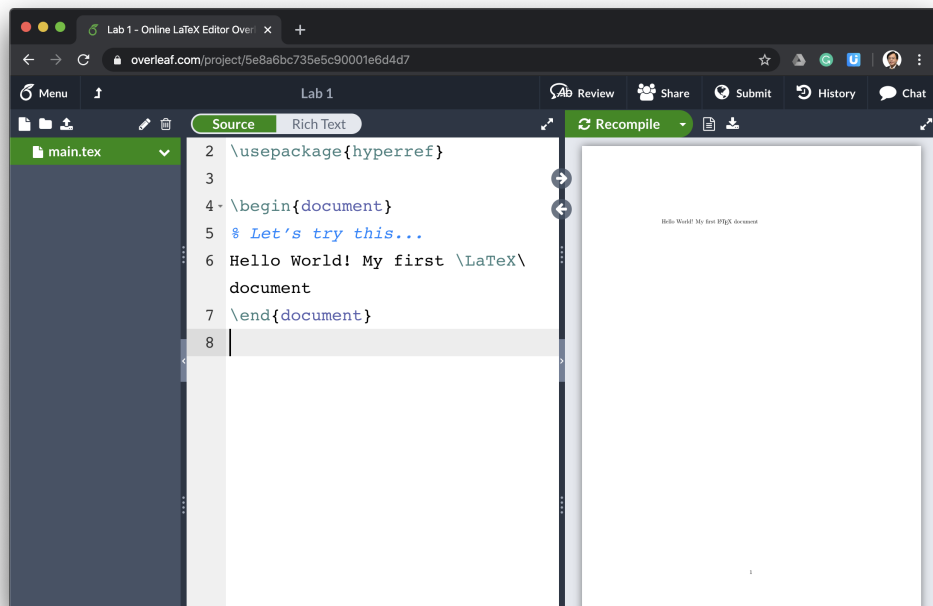
Navigate to <https://www.overleaf.com> and sign up an account. You can sign up using your google account.





Exercise 2

Click on the “New Project” and select “Blank Project”. Make sure on the right side, the “Recompile” option is set to Auto Compile “On”

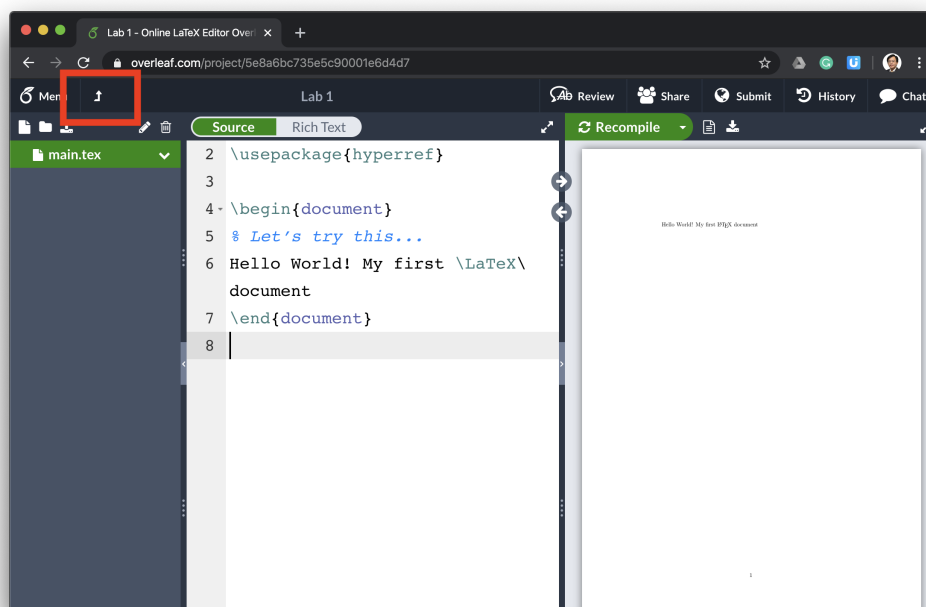


Type the following code:

```
\documentclass[a4paper]{article}
\usepackage{hyperref}
\begin{document}
% Let's try this...
Hello World! My first \LaTeX\ document
\end{document}
```

[Notes: (1) the line begins with % are comments, (2) the extra spacing between the words will be treated as one “space”. The codes between `\documentclass{article}` and `\begin{document}` is referred to as preamble.]

To get back to the main menu, press the “up arrow” button as shown the the figure below:



Exercise 3

Type the following code:

```
\# \$ \% \^{} \& \_ \{ \} \~{} \textbackslash
```

Exercise 4

Type the following code:

```
% this is my first LaTeX document
% -----Preamble section-----
\documentclass[a4paper,10pt]{article}
% -----Body section -----
\begin{document}
\noindent
This is my first year $3^{\text{rd}}$ trimester in\\
\{Faculty of Computing \& Informatics\},\\
Multimedia University. \\
I am experiencing text editing using \LaTeX,\\
a wonderful typesetting tool.\\
Today is \today. \\
\copyright\ by \textless your name here\textgreater.
\end{document}
```

[Note: remember to save your work!]

Exercise 5

Modify the above code to add in `\textrm{...}`. Type the following code:

```
\textrm{
This is my first year $3^{\text{rd}}$ trimester in \\
\{Faculty of Computing \& Informatics\}, \\
Multimedia University. \\
I am experiencing text editing using \LaTeX ,\\
a wonderful typesetting tool.\\
Today is \today. \\
\copyright\ by \textless your name here\textgreater.}
```

Exercise 6

Now, referring to Exercise 5, change from `\textrm{...}` to `\texttt{...}`

Exercise 7

Repeat the above process for each of the following fonts:

```
\textsl{...},  
\emph{...},  
\textsf{...},  
\textbf{...},  
\textit{...},  
\textsc{...}
```

Exercise 8

Add `{\tiny...}` to the text given above. Type the following code:

```
{\tiny  
This is my first year $3^{rd}$ trimester in \\  
\{Faculty of Computing \&\ Informatics\}, \\  
Multimedia University. \\  
I am experiencing text editing using \LaTeX ,\  
a wonderful typesetting tool.\  
Today is \today. \\  
\copyright\ by \textless your name here\textgreater.}
```

Exercise 9

Change `{\tiny...}` to:

```
{\scriptsize...},  
\footnotesize...},  
\small...},  
\normalsize...},  
\large...},  
\Large...},  
\LARGE...},  
\huge...},  
\Huge...}.
```

Exercise 10

Type the following code:

```
This \hspace{3cm} is a space of 3cm. \\
This \hspace{5cm} is a space of 5cm. \\
This \hspace{8cm} is a space of 8cm.
```

Exercise 11

Type the following code:

```
Today is the second day of Trimester break.
Weather is quite nice,
with the temperature of $27\,^{\circ}\mathrm{C}$.
Get a good rest then \ldots
```

Exercise 12

Type the following code:

```
\textemdash
\textendash
```

Exercise 13

Create a new tex document and type the following code:

```
\documentclass[a4paper, 10pt]{article}
\usepackage{showframe}
\usepackage[top=1cm, bottom=1cm, left=1cm, right=1cm]{geometry}
\usepackage{lipsum} % create dummy text
\begin{document}
\lipsum
\lipsum
\end{document}
```

The above codes have the following characteristics:

- it is an A4 paper size with ‘article’ type
- the `\usepackage(showframe)` package shows frame according to the page margin
- the page margin has been customized for its top, bottom, left and right margin with 1cm
- for demo purpose, the `\usepackage(lipsum)` package create dummy text

Do the following tasks:

1. Now, change the top and bottom to 2cm. Observe the changes in the generated PDF.
2. Change the left and right margin to 2in. Observe the changes.

Exercise 14

Share your tex document with your friend. To do that, click at the “Share” icon at the top right of the window. Next, key in the email of your friends and finally click “Share”.

