

1 Compiling your first document

Create a .tex file in Texmaker and paste the following lines into the empty file:

```
\documentclass{memoir}
\begin{document}
Hello world!
\end{document}
```

Try compiling the document. Do you see a pdf file with the words “Hello World!”?

2 Basic text formatting

- **Bold** text is done using `\textbf{text}`
- *Italic* (or emphasized) text is done using `\emph{text}`

For anything to show up in your document, it needs to be placed between `\begin{document}` and `\end{document}`! Play around with these commands and ensure that they work.

3 Chapters and sections

To structure your document, use L^AT_EX commands to create chapters and sections. A chapter is created using `\chapter{text}` and a section with `\section{text}`. Chapters are divided into sections and are numbered as such. For more levels of structure, you can use `\subsection{text}` and `\subsubsection{text}`. To prevent a chapter from showing up in the table of contents use `\chapter*{text}` and equivalently for sections etc.

Create three chapters, “Abstract”, “Introduction” and “Theory”. Make sure the abstract isn’t listed in the table of contents. Make some sections in the introduction in order to understand the concepts. Add the line `\tableofcontents` just after `\begin{document}` to generate a table of contents.

Fill out the document with some text to see how it looks. Use your own or generate some dummy text using <http://www.lipsum.com/>

4 Bullet points

To make bullet points, add the following to your document:

```
\begin{itemize}
\item item 1
\item item 2
\item item 3
\end{itemize}
```

To have a numbered list, replace `itemize` with `enumerate`.

5 Adding some formatting

Everything before `\begin{document}` is generally used to define some general characteristics about your document. This part of the document is known as the “preamble”. Try adding the following lines to your document (after `\documentclass` and before `\begin{document}`):

```
\usepackage{geometry}  
\chapterstyle{section}  
\usepackage{microtype}  
\usepackage[english]{babel}
```

Also change the documentclass to `\documentclass[a4paper,oneside]{memoir}`.

6 Adding a title

Add the following lines to the *preamble*:

```
\title{Your title}  
\author{Your name}
```

And add the command `\maketitle` just after `\begin{document}`. If you want the title to be on its own page, add `\clearpage` after `\maketitle`

7 Collaborative work

8 Introduction to references