

LaTeX

PHSG SEM 3 AND 5
PAPER : SEC A1
SUNETRA DAS

THE DOCUMENT ENVIRONMENT

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- ABSTRACT
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SECTIONING COMMANDS

- A BOOK HAS CHAPTERS WHILE AN ARTICLE HAS SECTIONS.
- THE COMMANDS FOR INSERTING SECTIONS ARE AS BELOW:

```
\begin{document}
```

```
  \begin{abstract}
```

The abstract has to be written here.

```
  \end{abstract}
```

```
  \section{Name of 1st section}
```

Body of 1st section...

```
  \section{Name of 2nd section}
```

Body of 2nd section...

```
  \subsection{name of subsection 1 of section 2}
```

This is the body of the 1st subsection of section 2

```
  \subsection{name of subsection 2 of section 2}
```

This is the body of the 2nd subsection of section 2

```
  \subsubsection{subsubsection of subsection 2.2}
```

This subsubsection's content...

```
\end{document}
```

SECTIONING COMMANDS

- THE SECTIONS, SUBSECTIONS AND SUBSUBSECTIONS ARE AUTOMATICALLY NUMBERED.
- FOR SECTIONS, NO NEED TO USE `\begin` AND `\end` COMMANDS TO INDICATE WHICH CONTENT BELONGS TO A GIVEN BLOCK.
- TO GET AN UNNUMBERED SECTION HEADING, FOLLOW THE COMMAND NAME WITH AN ASTERISK BEFORE THE OPENING CURLY BRACE:

`\subsection*{Introduction}`

Command
<code>\part{''part''}</code>
<code>\chapter{''chapter''}</code>
<code>\section{''section''}</code>
<code>\subsection{''subsection''}</code>
<code>\subsubsection{''subsubsection''}</code>
<code>\paragraph{''paragraph''}</code>
<code>\ subparagraph{''subparagraph''}</code>

ORDINARY PARAGRAPHS

- PARAGRAPHS OF TEXT COME AFTER SECTION HEADINGS.
- THESE FORM THE BODY OF THE PARTICULAR SECTION.
- TYPE THE TEXT IN A PARAGRAPH AND LEAVE A BLANK LINE BETWEEN TWO PARAGRAPHS.
- THE BLANK LINE MEANS “START A NEW PARAGRAPH HERE”.
- IT DOES NOT MEAN YOU GET A BLANK LINE IN THE TYPESET OUTPUT.

LISTS IN LATEX

- UNORDERED LISTS
- ORDERED LISTS

UNORDERED LISTS

- UNORDERED LISTS ARE PRODUCED BY THE ITEMIZE ENVIRONMENT.
- EACH LIST ENTRY MUST BE PRECEDED BY THE `\item` COMMAND, AS SHOWN BELOW:

```
\documentclass{article}  
\begin{document}  
  \begin{itemize}  
    \item This is the first item in the  
unordered list.  
    \item This is the second item.  
\end{document}
```

- This is the first item in the unordered list.
- This is the second item.

ORDERED LIST

- ORDERED LISTS USE THE SAME SYNTAX AS UNORDERED LISTS BUT ARE CREATED USING THE ENUMERATE ENVIRONMENT.

```
\documentclass{article}  
\begin{document}  
  \begin{enumerate}  
    \item This is the first entry in our list.  
    \item This is the second entry.  
\end{document}
```

1. This is the first entry in our list.
2. This is the second entry.

CHAPTERS IN BOOK

- BOOKS ARE USUALLY PARTITIONED INTO CHAPTERS, SECTIONS, SUBSECTIONS, SO FORTH.

```
\documentclass{book}
\begin{document}
    \chapter{First Chapter}
    \section{Introduction}
    This is the first section.
    \section{Second Section}
    This is the second section.
    \chapter{Subsection}
    This is the subsection.
\end{document}
```

Chapter 1

First Chapter

1.1 Introduction

This is the first section.

1.2 Second Section

This is the second section.

1.2.1 First Subsection

This is the subsection.