Latex — Text Formatting

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Reading: NSSI Chapter 2.
1 Special Symbols

1.1 Quotation Marks

1. For quotation marks use ‘‘ for opening quotes and ’’ for closing quotes.

2. For single quotes use one of each.

Example:

Do you mean ‘‘eye’’ or ‘i’?

Do you mean “eye” or ‘i’?

1.2 Dashes and Hypens

There are three types of dashes in \LaTeX.

Example:

1 - short-dashes

2 -- longer--dashes

3 --- longest---dashes

1 - short-dashes
2 - longer-dashes
3 — longest—dashes

2 Font Selection

2.1 Font Types

The font types generally available in \LaTeX are:

1. \texttt{...} roman
2. \texttttt{...} typewriter
3. \textsl{...} slanted
4. \textsf{...} sans serif
5. \textbf{...} bold face
6. \textit{...} italic
7. \textsc{...} SMALL CAPITALS

Example:

These \texttt{sentences} \texttt{use a \textsl{number of}} \texttt{\textsf{different} \textbf{fonts}}. \texttt{\textit{They are hard}} \texttt{\textsc{to read}}.

These sentences use a number of different fonts. They are hard to read.

2.2 Font Sizes

The font size, either 10pt (the default), 11pt or 12pt, for the whole document is set within the initial \documentclass command, e.g.

\documentclass[12pt]{article}

The font size and type of title and section headings are chosen automatically by \LaTeX.

The font sizes generally available in \LaTeX are:

1. \texttt{\texttiny \textit{...}} tiny
2. \texttt{\textscriptsize \textit{...}} very small
3. \texttt{\textfootnotesize \textit{...}} quite small
4. \texttt{\textsmall \textit{...}} small
5. \texttt{\textnormalsize \textit{...}} normal
6. \texttt{\textlarge \textit{...}} larger
7. \texttt{\textLARGE \textit{...}} larger still
8. \{\LARGE \ldots\} quite large
9. \{\huge \ldots\} very large
10. \{\Huge \ldots\} huge

Example:

When combining changes of font \{\Large \textsl{size} and \textbf{type}\}, remember that the \{\small \textsl{size}\} change comes first.

When combining changes of font \textit{size} and \textbf{type}, remember that the \textit{size} change comes first.

3 Spacing and Indentation

3.1 Paragraphs and Indentation

We have already seen that in \LaTeX{} a blank line starts a new paragraph. By default \LaTeX{} indents each paragraph except the first paragraph of a Chapter, Section etc. This can be controlled using the commands \texttt{\indent} and \texttt{noindent}.

Example:

Normally paragraphs are indented.

\texttt{noindent} But this one isn't.

Normally paragraphs are indented.
But this one isn't.
3.2 Line and Page Breaks

1. The commands `\` or `\newline` force a new line to be started without starting a new paragraph.

2. The command `\newpage` can be used to force a new page to be started.

Example:

This is how to start a new line `\`
without starting a new paragraph.

Of course, a new paragraph is started by a blank line.

This is how to start a new line
without starting a new paragraph.
Of course, a new paragraph is started by a blank line.

3.3 Spacing Between Paragraphs

By default \LaTeX{} adds no extra space between paragraphs. Sometimes, to make certain paragraphs stand out, you need to add extra space. This can be done with the `\smallskip`, `\medskip` and `\bigskip` commands.

Example:

Here is an example `\ldots`

of different spacings `\ldots`

`\smallskip`

between paragraphs.

`\medskip`

This is useful in highlighting `\ldots`

`\bigskip`
certain paragraphs.

Here is an example ...
of different spacings ...
between paragraphs.
This is useful in highlighting ...
certain paragraphs.

4 Chapters and Sections

The sectioning commands

\section{...}
\subsection{...}
\subsubsection{...}

are available in the article document class. The additional command \chapter is available in the report and book document classes.

The numbering of sections is done automatically by \LaTeX, as is the font selection for titles and spacing between sections.

The

\subsubsection*{...}

command does not print the subsubsection number. This is how examples are introduced in these notes.

5 Titles and Tables of Contents

The following example gives the first few lines of this document:

Example:
\documentclass[12pt]{article}
\title{AMTH42 \hfill Lecture 2}\[6mm]
\LaTeX{} --- Text Formatting
\author{}
\date{}

\begin{document}
\maketitle
\tableofcontents
\medskip
\noindent \textbf{Reading:} NSSI Chapter 2.
\section{Special Symbols}

\section{Environments}
These are generally associated with a pair of matching commands
\begin{quote}
\begin{verbatim}
\begin{...}
\end{...}
\end{verbatim}
\end{quote}

\section{Lists}
\LaTeX{} has three types of list environments:
\begin{quote}
1. \texttt{enumerate}
2. \texttt{itemize}
3. \texttt{description}
\end{quote}

The individual items in the list are introduced by the \texttt{item} command. List can be nested, that is you can have lists within lists.

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Example:

\begin{enumerate}
\item The \texttt{enumerate} environment numbers the elements in the list.
\item The \texttt{itemize} environment precedes each item by a large dot as follows:
  \begin{itemize}
    \item This is the first item of an \texttt{itemize} environment.
    \item And this is the second.
  \end{itemize}
\item This is an example of the \texttt{description} environment.
  \begin{description}
    \item[First] item in the list.
    \item[Second] item in the list.
  \end{description}
\end{enumerate}

1. The \texttt{enumerate} environment numbers the elements in the list.
2. The \texttt{itemize} environment precedes each item by a large dot as follows:
   - This is the first item of an \texttt{itemize} environment.
   - And this is the second.
3. This is an example of the \texttt{description} environment.

   \texttt{First} item in the list.

   \texttt{Second} item in the list.

\subsection{Centering Text}

Example:

\begin{center}
This is an example \texttt{\} of centered \texttt{\} text.
\end{center}
6.3 Verbatim

Text enclosed between a \begin{verbatim} and \end{verbatim} pair is printed exactly as is in typewriter font, including spaces and linebreaks, and with \LaTeX{} commands ignored.

Example:

\begin{verbatim}
\LaTeX{} commands are ignored in verbatim environments, but spaces and linebreaks are faithfully followed.
\end{verbatim}

\LaTeX{} commands are ignored in verbatim environments, but spaces and linebreaks are faithfully followed.

The \texttt{verbatim} environment is used for the examples in these notes. The same effect within paragraphs can be obtained with the \verb command. The character immediately following the \verb is the delimiting character; the following text will be printed verbatim until this delimiting character is reached again.

Example:

To print \verb+\verb+ we need to use \verb/\verb+/\verb+/, since \verb+\texttt{\verb}+ will try to execute a \verb+\verb+ command while using \texttt{typewriter} font.

To print \verb we need to use \verb+\verb+, since \texttt{\verb} will try to execute a \verb command while using \texttt{typewriter} font.

In this example I used + and / as delimiters.