\documentclass{article}
\usepackage{listings}
\begin{document}
\section*{AMTH142 Lecture 2}
\section*{LaTeX – Formatting Text}
\begin{flushright}
April 20, 2007
\end{flushright}
\tableofcontents
\section{Formatting Text}
\subsection{Special Symbols}
\subsubsection{Quotation Marks}
\subsubsection{Dashes and Hyphens}
\subsection{Font Selection}
\subsubsection{Font Types}
\subsubsection{Font Sizes}
\subsection{Spacing and Indentation}
\subsubsection{Paragraphs and Indentation}
\subsubsection{Line and Page Breaks}
\subsubsection{Spacing Between Paragraphs}
\subsection{Sections and Subsections}
\subsection{Titles and Tables of Contents}
\subsection{Environments}
\subsubsection{Lists}
\subsubsection{Centering Text}
\subsubsection{Verbatim}
\end{document}
2 Formatting Text

2.1 Special Symbols

2.1.1 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’?

2.1.2 Dashes and Hyphens

There are three types of dashes in \LaTeX.

Example:

1 - short-dashes and hyphens

2 -- long--dashes

3 --- longer---dashes

1 - short-dashes and hyphens

2 – long–dashes

3 — longer—dashes

2.2 Font Selection

2.2.1 Font Types

The font types generally available in \LaTeX are:

1. \texttt{...} roman

2. \texttt{...} typewriter

3. \texttt{...} slanted

4. \texttt{...} sans serif

5. \texttt{...} bold face

6. \texttt{...} italic
7. \textsc{...} small capitals

8. \emph{...} emphasized

Example:

This \textit{sentence} \texttt{uses} a \textsl{number} of \textsf{different} \textbf{fonts} \textit{which} \textsc{makes} it \textbf{hard} to \textsc{read}. \texttt{\emph{Emphasized text} differs from \textit{italic text} in that \textsf{it can be \emph{combined} with other font changes.}}

This sentence uses a number of different fonts which makes it hard to read. Emphasized text differs from italic text in that it can be combined with other font changes.

2.2.2 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{\tiny ...} tiny
2. \texttt{\scriptsize ...} very small
3. \texttt{\footnotesize ...} quite small
4. \texttt{\small ...} small
5. \texttt{\normalsize ...} normal
6. \texttt{\large ...} larger
7. \texttt{\Large ...} larger still
8. \texttt{\LARGE ...} quite large
9. \texttt{\huge ...} very large
10. \texttt{\Huge ...} huge
Example:

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

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

2.3 Spacing and Indentation

2.3.1 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.

\noindent But this one isn’t.

Normally paragraphs are indented.
But this one isn’t.

2.3.2 Line and Page Breaks

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

2. The command \texttt{\newpage} can be used to force a new page to be started.

Example:

This is how to start a new line \texttt{\\}
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.
2.3.3 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 of \ldots different spacings \ldots

\smallskip between paragraphs.

\medskip

This is useful in highlighting certain paragraphs.

\bigskip

It is also useful with equations, tables and diagrams.

Here is an example of \ldots different spacings \ldots between paragraphs.

This is useful in highlighting certain paragraphs.

It is also useful with equations, tables and diagrams.

2.4 Sections and Subsections

The sectioning commands

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

are available in the \texttt{article} document class. The additional command `\chapter` is available in the \texttt{report} and \texttt{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.
Example
\subsection*{Example}

This is how examples are introduced in these notes.

Example
This is how examples are introduced in these notes.

2.5 Titles and Tables of Contents
The following example gives the first few lines of this document\footnote{You usually need to run a document through \LaTeX twice to get the table of contents correct.}:

Example:
\documentclass[11pt,a4paper]{article}
\title{AMTH142 \hfill Lecture 2\\[6mm] \LaTeX\{} -- Formatting Text\}
\author{}
\begin{document}
\maketitle
\tableofcontents
\newpage
\section{Formatting Text}
\subsection{Special Symbols}
\subsection{Quotation Marks}
\subsubsection{Quotation Marks}
\begin{document}
\maketitle
\tableofcontents
\newpage
\section{Formatting Text}
\subsection{Special Symbols}
\subsection{Quotation Marks}
\end{document}
2.6.1 Lists

\LaTeX{} has three types of list environments:

1. `enumerate`
2. `itemize`
3. `description`

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.

Example:

\begin{verbatim}
\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}
\end{verbatim}

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.
2.6.2 Centering Text

Example:

\begin{center}
This is an example of centered text. Centering is useful when including tables and diagrams.
\end{center}

This is an example of centered text. Centering is useful when including tables and diagrams.

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

Example:

An important difference between \verb|\verb+\verb| and \verb|\verb+\texttt+ is that \LaTeX{} commands have their intended effect inside \verb|\verb+\texttt+, while inside \verb|\verb+\verb+ they are printed verbatim. In this example I have used \texttt{+} as the delimiter.
An important difference between \verb and \texttt is that \LaTeX commands have their intended effect inside \texttt, while inside \verb they are printed verbatim. In this example I have used + as the delimiter.