Basic Text Formatting with \LaTeX

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Special Characters

- Single quotation marks: left ‘ and right ’
- Double quotation marks: two single left quotes ‘ ‘ and two single right quotes ’ ’ or the double quote key (”)
- A double quote followed by a single quote, or vice-versa: command \, between two quotation marks

For example: “‘Fi’ or ‘fum’ ”he asked
Special Characters

There are three kinds of dashes in typeset documents by typing one, two, or three “-” characters:

An intra-word dash, as in X-ray

A medium dash for number range, like 1–2

A punctuation dash—like this
## Special Characters

<table>
<thead>
<tr>
<th>Character</th>
<th>Type in file</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
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<tr>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>&amp;</td>
<td>&amp;</td>
</tr>
<tr>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>^</td>
<td>^{}</td>
</tr>
<tr>
<td>~</td>
<td>~{}</td>
</tr>
<tr>
<td>{</td>
<td>{</td>
</tr>
<tr>
<td>}</td>
<td>}</td>
</tr>
<tr>
<td>\</td>
<td>$\backslash$</td>
</tr>
<tr>
<td>&lt;</td>
<td>&lt;$ (or \textless)</td>
</tr>
<tr>
<td>&gt;</td>
<td>$&gt;$ (or \textgreater)</td>
</tr>
</tbody>
</table>
## Special Characters

<table>
<thead>
<tr>
<th>Command</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>'{o}</td>
<td>ò</td>
</tr>
<tr>
<td>&quot;{o}</td>
<td>ö</td>
</tr>
<tr>
<td>^{o}</td>
<td>õ</td>
</tr>
<tr>
<td>\v{o}</td>
<td>ë</td>
</tr>
<tr>
<td>b{o}</td>
<td>o</td>
</tr>
<tr>
<td>d{o}</td>
<td>o</td>
</tr>
<tr>
<td>r{o}</td>
<td>õ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>'{o}</td>
<td>ó</td>
</tr>
<tr>
<td>H{o}</td>
<td>õ</td>
</tr>
<tr>
<td>~{o}</td>
<td>ù</td>
</tr>
<tr>
<td>={o}</td>
<td>õ</td>
</tr>
<tr>
<td>.{o}</td>
<td>ó</td>
</tr>
<tr>
<td>c{o}</td>
<td>q</td>
</tr>
<tr>
<td>t{oo}</td>
<td>õo</td>
</tr>
</tbody>
</table>
Type Style

These commands can be combined, provided the font thus requested actually exists.

For example: \textbf{\textit{This is bold italic}} produces: *This is bold italic.*
Type Size

\begin{itemize}
\item The actual size produced by each command depends on the initial point size selected for the document.
\item The size-changing commands are usually used within a group (i.e., braces) to delimit the range of their action.
\item To change both type size and style at the same time, commands can be used together.
\end{itemize}

\begin{verbatim}
\normalsize normal size
\small small
\footnotesize smaller than small
\scriptsize smaller still
\tiny tiny
\large large
\Large larger
\LARGE larger still
\huge huge
\Huge hugest
\end{verbatim}
TeX ignores the way the input is formatted, but pay attention only to the logical concepts end of sentence and end of paragraph.

The command “\ \ ” will force a new line.

A value inside square brackets following “\ \ ” will specify the amount of blank space between lines.

The command to force a new page is \newpage.
Sentences and Paragraphs

Example:

The ends of words and sentences are marked by spaces you type. It doesn’t matter how many spaces you type; one is as good as 100.

The ends of words and sentences are marked by spaces you type. It doesn’t matter how many spaces you type; one is as good as 100.

This Line will be 20pt away from previous sentence.
Preventing Line Breaks

- Line breaking should be prevented at certain interword spaces.

  *For example, the expression “Chapter 3” looks strange if the “Chapter” ends one line and the “3” begins the next.*

- A tilde character ~ produces an ordinary interword space at which \TeX{} will never break a line.

  
  Mr.~Jones  Mr. Jones
  U.~S.~Grant  U. S. Grant
Horizontal and Vertical Space

- If you want to leave horizontal and vertical space in your text, use commands `\hspace*` and `\vspace*`.
- If you want to center one line, use the command `{\centerline...}

```
{\centerline This line will be centered.}
This line will be centered.
```

```
\hspace*{1in} This text starts from a one-inch space.
This text starts from a one-inch space.
```
Lists

Example of Enumerate
\begin{enumerate}
  \item Sugar
  \item Cream
  \item Chocolate
\end{enumerate}

Example of Itemize
\begin{itemize}
  \item Mix all ingredients together.
  \item Boil until the thermometer reaches 112 °C.
  \item Stir and cool.
\end{itemize}

1. Sugar
2. Cream
3. Chocolate

- Mix all ingredients together.
- Boil until the thermometer reaches 112 °C.
- Stir and cool.
Example of Description
\begin{description}
\item[dog] A loving animal that likes to sleep on the furniture.
\item[cat] Aloof creature that can warm your feet on a winter’s night
\item[horse] Large animal, gives great rides. Eats a lot, luckily doesn’t sleep on the furniture.
\end{description}
dog A loving animal that likes to sleep on the furniture.
cat Aloof creature that can warm your feet on a winter’s night
horse Large animal, gives great rides. Eats a lot, luckily doesn’t sleep on the furniture.
Lists

example of nesting list environments

Here are some useful environments:
\begin{itemize}
\item center environment
\item quote environment
\item the three list environments:
  \begin{enumerate}
  \item enumerate (uses numbers)
  \item itemize (uses bullets)
  \item description (uses words)
  \end{enumerate}
\end{itemize}
Verbatim Text

- If you use the verbatim environment, everything input between the begin and end commands are processed as if by a typewriter. All spaces and new lines are reproduced as given. Any \LaTeX command will be ignored and handled as plain text.

- If you use the alltt package, it’s almost the same as verbatim except it still process other \LaTeX commands inside the begin and end commands.
Verbatim Text

\begin{verbatim}
The verbatim environment simply reproduces every character you input, including all spaces!
\end{verbatim}

Verbatim extended with the ability to use normal commands. Therefore, it is possible to \texttt{emph} (emphasize) words in this environment, for example.

\begin{alltt}
Verbatim extended with the ability to use normal commands. Therefore, it is possible to \texttt{emph} (emphasize) words in this environment, for example.
\end{alltt}
Comments

- Special character %, that will comment out all the rest of the line after itself
- An environment called `comment` will comment out everything within itself.
  (Require “verbatim package”)

This is another example for embedding comments in your document.
Thank you!