Basic commands

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Contents

1 Text formatting

1.1 Special characters

There are some special characters which cannot be simply used because they are part of the LaTeX-syntax. The way to use them is putting the character \ in front.

Size	LaTeX-command
&	`\&`
#	`\#`
%	`\%`
{}	`\{\}`
_	`\_`
$	`\$`
‖	`$\|$`

Table 1: Special characters

1.2 Basics

1.2.1 Spaces

LaTeX does not care about how many spaces you type.

The correct distance between words is computed automatically.

```
The correct distance between     words
is computed      automatically.
```

1.2.2 Line breaks

For a line break you have to use \\.

Here you can see
two line
breaks

```
Here you can see\\
two line\\
breaks
```

1.2.3 New paragraph

For beginning a new paragraph type \\ and space.

This is a paragraph.

```
This is a paragraph.\\
```

This is a new paragraph.

```
This is a new paragraph.
```

1.2.4 Aligning

Text can
be
left-aligned.

```
\begin{flushleft}
Text can\\
be\\
left-aligned.
\end{flushleft}
```



```
\begin{flushright}
Text can\\
be\\
right-aligned.
\end{flushright}
```

Text can
be
centered.

```
\begin{center}
Text can\\
be\\
centered.
\end{center}
```

1.3 Typefacing

LaTeX provides all well known typeface settings.

Type	Output	LaTeX-command
italics	*Linguistics*	`\textit{Linguistics}`
boldface	**Linguistics**	`\textbf{Linguistics}`
underlined	Linguistics	`\underline{Linguistics}`
small caps	Linguistics	`\textsc{Linguistics}`
slanted	*Linguistics*	`\textsl{Linguistics}`
sans serif	Linguistics	`\textsf{Linguistics}`
typewriter	`Linguistics`	`\texttt{Linguistics}`
superscript	Linguistics^2	`Linguistics$^{2}$`
subscript	Linguistics$_{Leipzig}$	`Linguistics$_{Leipzig}$`
single quote	‘Linguistics’	`‘Linguistics’`
double quote	“Linguistics”	`‘‘Linguistics’’`
angle brackets	»Linguistics«	`>>Linguistics<<`

Table 2: Basic typefacing

Text underlined with `\underline{text}` cannot be wrapped. Alternatively you can use `\uline{text}`. For this command load the package `\usepackage{ulem}`. Further commands of the ulem-package:

Type	Output	LaTeX-command
underlined	Linguistics	`\uline{Linguistics}`
double underlined	Linguistics	`\uuline{Linguistics}`
wiggly underlined	Linguistics	`\uwave{Linguistics}`
crossed (horizontal)	~~Linguistics~~	`\sout{Linguistics}`
crossed (diagonal)	Linguistics	`\xout{Linguistics}`

Table 3: Commands with the package ulem

1.4 Font size

Font size can be changed globally in the preamble as an option of `\documentclass` or individually within the document.

Size	LaTeX-command
Linguistics	`\tiny{Linguistics}`
Linguistics	`\scriptsize{Linguistics}`
Linguistics	`\footnotesize{Linguistics}`
Linguistics	`\small{Linguistics}`
Linguistics	`\normalsize{Linguistics}`
Linguistics	`\large{Linguistics}`
Linguistics	`\Large{Linguistics}`
Linguistics	`\LARGE{Linguistics}`
Linguistics	`\huge{Linguistics}`

Table 4: Font sizes

1.5 Boxes

You can put boxes around text. Therefore load the package `\usepackage{fancybox}`.

Type	Output	LaTeX-command
angled	Linguistics	`\fbox{Linguistics}`
oval	Linguistics	`\ovalbox{Linguistics}`
oval bold faced	Linguistics	`\Ovalbox{Linguistics}`
angled double	Linguistics	`\doublebox{Linguistics}`
angled with shadow	Linguistics	`\shadowbox{Linguistics}`

Table 5: Boxes with the package fancybox

1.6 Footnotes

For footnotes there is the command `\footnote{text}`.

Output:

I am a sentence with a footnote.[1].

LaTeX-code

```
I am a sentence with
a footnote.\footnote{I am a footnote}.
```

There is the option of just defining the position of the footnote and to place the footnote text later in the document.

Output:

Footnote text[2] can be placed separately from its position.

LaTeX-code

```
Footnote text\footnotemark{} can be placed
separately from its position.\\


\footnotetext{I am another footnote.}
```

1.7 Colours

For using colours load `\usepackage[usenames,dvipsnames]{xcolor}`. The 8 standard colours are: white, black, red, green, blue, cyan, magenta, yellow. There are 68 prespecified more colours. Their names you can be found here: *Names of 68 colours*

1.7.1 Colouring text

Output:

I want to colour only one word or a some words or lines.

LaTeX-code

```
I want to \textcolor{BrickRed}{colour} only
one \textcolor{blue}{word} or a
\textcolor{Aquamarine}{some words or lines}.
```

If you want to colour more text you can use `\color{your colour}`. This command will colour your text from the point on where you put it. If you put it into the preambel the text colour of your whole document will be specified.

[1] I am a footnote.
[2] I am another footnote.

1.7.2 Defining colours

You can define colours on your own. The definition must be done in the preamble.

Type:	LaTeX-code

Mixing the colours red, green and blue.
Example:
This is the self-defined colour lightblue.
	`\definecolor{Name}{rgb}{X,Y,Z}`
	
	`X, Y, Z = values between 0 and 1 which define the portion of red, green and blue.`
	
	`\textcolor{lightblue}{This is the self-defined colour lightblue.}`
	
	`code for lightblue: (must be in the preambel!)`
	`\definecolor{lightblue}{rgb}{0,0.8,0.8}`

Mixing the colours cyan, magenta, yellow and black.
Example:
This is the self-defined colour orange.
	`\definecolor{Name}{cmyk}{X,Y,Z,W}`
	
	`X, Y, Z, W = values between 0 and 1 which define the portion of cyan, magenta, yellow and black.`
	
	`\textcolor{orange}{This is the self-defined colour orange.}`
	
	`code for orange: (must be in the preambel!)`
	`\definecolor{orange}{cmyk}{0,0.5,1,0}`

Different shades of gray.
Example:
This is the self-defined colour lightgray.
	`\definecolor{Name}{gray}{X}`
	
	`X = value between 0 and 1 which defines the shade of gray.`
	
	`\textcolor{lightgray}{This is the self-defined colour lightgray.}`
	
	`code for lightgray: (must be in the preambel!)`
	`\definecolor{lightgray}{gray}{0.8}`

1.7.3 Colouring pages

If you want to have coloured pages put `\pagecolor{your colour}` at the page in your document, where you want to start the colouring. If you put it into the preamble all pages of your document will be coloured.

1.7.4 Colouring boxes

Output:

I want to have coloured boxes.

LaTeX-code

```
I \colorbox{Fuchsia}{want} to have coloured
\colorbox{Apricot}{boxes}.
```

You can also colour the frame, the background and the text of a box:

Output:

I am a coloured box with a coloured frame

LaTeX-code

```
\fcolorbox{red}{Aquamarine}{I am a coloured
box with a coloured frame}
```

How to define the frame, background and text colour by yourself:

Defining:

LaTeX-code

Width of the frame
Colour of the frame
Colour of background
Colour of text

```
\fboxrule Xmm
\definecolor{frame}{rgb}{X,Y,Z}
\definecolor{background}{rgb}{X,Y,Z}
\definecolor{text}{rgb}{X,Y,Z}
```

Putting all definitions together

```
\fcolorbox{frame}{background}{text}
```

Output:

I am a completely self-defined box.

```
\fboxrule 2mm
\definecolor{frame}{rgb}{.7,1,.7}
\definecolor{background}{gray}{.8}
\definecolor{text}{cmyk}{.4,1,1,0}
\fcolorbox{frame}{background}{\color{text} I
am a completely self-defined box.}
```

2 Lists

With the following commands you can easily create lists.

2.1 Lists with bullet points

2.1.1 Simple list

Output:

- This
- is
- a list.

LaTeX-code

```
\begin{itemize}
\item This
\item is
\item a list.
\end{itemize}
```

2.1.2 Recursive list

The command is recursive:

- This
- is
  - recursive
  - as
  - you
    - can
    - see
    - in
  - this
- example list

```
\begin{itemize}
\item This
\item is

\begin{itemize}
\item recursive
\item as
\item you

\begin{itemize}
\item can
\item see
\item in
\end{itemize}

\item this
\end{itemize}
\item example list
\end{itemize}
```

2.2 Numbered lists

For numbered lists you need to load `\usepackage{enumerate}`.

2.2.1 Simple numbered list

1. This
2. is
3. a list
4. with numbers.

```
\begin{enumerate}

\item This
\item is
\item a list
\item with numbers.

\end{enumerate}
```

2.2.2 Recursive numbered list

1. This
2. is
   (a) recursive
   (b) as
   (c) you
      i. can
      ii. see
      iii. in
   (d) this
3. example list

```
\begin{enumerate}
\item This
\item is

\begin{enumerate}
\item recursive
\item as
\item you

\begin{enumerate}
\item can
\item see
\item in
\end{enumerate}

\item this
\end{enumerate}
\item example list
\end{enumerate}
```

2.2.3 Changing list symbols

Within the `enumerate` environment you can change the list symbols (not possible with `itemize`!)

(1) List with Roman numerals

(i) I like
(ii) Roman
(iii) numerals.

```
\begin{enumerate}[(i)]
\item I like
\item Roman
\item numerals.
\end{enumerate}
```

(2) List with dashes

– I
– prefer
– dashes.

```
\begin{enumerate}[--]
\item I
\item prefer
\item dashes.
\end{enumerate}
```

(3) Changing individual bullets

(i) Every bullet point
(a) can
(3) be different.

```
\begin{enumerate}
\item[(i)] Every bullet point
\item[(a)] can
\item[(3)] be different.
\end{enumerate}
```

3 Columns

To put something in columns load `\usepackage{multicol}`.

3.1 Two columns

The command for creating columns is:

```
\begin{multicols}{2}

This is normal text inside a column.

\columnbreak

This is more text inside a column.

\end{multicols}
```

Output:

This is normal text inside a column.

This is more text inside a column.

3.2 More columns

The command for creating three columns is:

```
\begin{multicols}{3}

This is normal text inside a column.

\columnbreak

This is more text inside a column.

\columnbreak

This is even more text inside a column.

\end{multicols}
```

Output:

This is normal text inside a column.

This is more text inside a column.

This is even more text inside a column.

3.3 Lists within columns

You can basically put everything inside columns (lists, tables, examples, graphics, ...)

```
\begin{multicols}{2}

\begin{itemize}
\item This is
\item a list
\item inside a column.
\end{itemize}

\columnbreak

\begin{itemize}
\item This is
\item another list
\item inside a column.
\end{itemize}

\end{multicols}
```

Output:

- This is
- a list
- inside a column.

- This is
- another list
- inside a column.

3.4 Changing column space

To change space between columns put `\columnsep` before `\begin{multicols}`

```
\columnsep 8cm
\begin{multicols}{2}

\begin{itemize}
\item This is a list
\item  inside a column
\item with broader space.
\end{itemize}

\columnbreak

\begin{itemize}
\item This is another list
\item inside a column.
\item with broader space.
\end{itemize}

\end{multicols}
```

Output:

- This is a list
- inside a column
- with broader space.

- This is another list
- inside a column.
- with broader space.

Ouput with `\columnsep -8`

- This is a list
- inside a column
- with shorter space.

- This is another list
- inside a column.
- with shorter space.

4 Further useful commands

4.1 Changing space manually

4.1.1 Vertical space

To change vertical space type `\vspace{xcm}` between your paragraphs/lines/items.

(4) Changing space between lines

```
I want to have more space between this line.

\vspace{0,8cm}

and this line.
```

Output:
I want to have more space between this line.

and this line.

(5) Changing space between items of lists

```
\begin{itemize}
\item I want to have \vspace{-0,4cm}
\item less space
\item between my items.
\end{itemize}
```

Output:

- I want to have
- less space
- between my items.

4.1.2 Horizontal space

To change horizontal space type `\hspace{xcm}` between your lines.

```
I want to have \hspace{4cm} more space between my words.
```

Output:
I want to have more space between my words.

4.1.3 Filling lines

With the command `\hfill` you can put text till the end of the line.

```
I want to have some text \hfill at the end of my line.
```

Output:
I want to have some text at the end of my line.

4.1.4 Page break

If you want to put something in your text (paragraphs, tables, examples, graphics, ...) on the next page you can force LaTeX to do that with the command `\newpage`

4.2 Links

If you want to include a link in your document load `\usepackage{hyperref}` and type `\url{your link}`: `www.uni-leipzig.de`