Lesson 0
Introduction to \LaTeX{} and some of its tools

GUT 2019 meeting

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Guess What! (Appetizer)

This is a short test to check whether you’re typography-savvy and how well you know \LaTeX.
Some fun before starting

Guess What! (Appetizer)

This is a short test to check whether you’re typography-savvy and how well you know \LaTeX. The next slides show some pages from books, journals and covers typeset by this lesson authors.
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Guess What! (Appetizer)

This is a short test to check whether you’re typography-savvy and how well you know \LaTeX. The next slides show some pages from books, journals and covers typeset by this lesson authors. Please, write down the image number followed by B if you think the page has been typeset with \LaTeX, followed by an A otherwise. We’ll see the solutions at the end of the lesson.
1: Mathematical formulae and diagrams

\[\phi(A, \pi) = \int_{\partial E} g \, d\sigma,\]

ove \(\mathbf{n}\) è il versore normale di \(\Gamma\). Quindi ciascuna di queste funzioni fornisce, localmente, una stima per difetto dell’area.

Nel caso in cui \(\Gamma = \partial E\), scegliendo \(\pi = \pi_{yz}\) otteniamo

\[\int_E \frac{\partial g}{\partial x} \, dx\, dy\, dz = \int_{\Gamma} g \, d\sigma, \quad \forall g \in C^1_c(\mathbb{R}^3).\]

Nella terminologia moderna \(\phi(\cdot, \pi_{yz})\) è quindi la derivata nel senso delle distribuzioni della funzione caratteristica \(1_E\) lungo la direzione \(x\) (e analogamente \(\phi(\cdot, \pi_{xy})\) e \(\phi(\cdot, \pi_{zx})\)).
Introduction to \LaTeX\ and some of its tools

Some fun before starting

2: Frontispiece of a proceedings volume, published by Olschki
beam in terms of thickness and matter mean both equal and similar in Arabic. There is a clear preference in Arabic mathematical texts for using the first for equal and the second for similar. Thus, Knorr translated them in this manner (Knorr 1982, p. 139). In the given context it is clear though that similarity is not meant literally, but in the sense of having the same property. This ambiguity reflects the use of ἴσος and ὁμοίος for respective concepts in Greek.

5.2. Investigation 2

Liber de Canonio, Proposition II

Si fuerit proportio ponderis in termino minoris portionis suspensorum, ad superhabundatiam ponderis maioris portionis ad minorem, sicur proportio longitudinis totius canonii ad duplam longitudinis minoris portionis, erit canonium parallelum epipeda orizontis (Moody & Clagett 1952, p. 66).

If the proportion of the weight suspended at the end of the smaller portion to the surplus of the weight of the greater portion to the smaller will be like the proportion of the length of the entire beam to the double of the length of the smaller portion, the beam will be parallel to the surface of the horizon (Cf. Moody & Clagett 1952, p. 67).

Again, the content of both theorems is the same and the two enunciations are similar, but not identical. Their difference is greater than in the previous case, because the Liber de canonio does not repeat the description of the properties of the beam and the suspended weight and thus has to integrate the latter into the description of the proportion. It differs from the ziyyada also in regard to the placement of the term weight in the description of the second term of the proportion. The Liber de canonio uses the term only once between superhabundatiam and maioris. The ziyyada uses it twice, once before the surplus and once before the shorter part. While the formulation of the Liber de canonio is imprecise, but comprehensible, the formulation of the ziyyada is comprehensible, but false. It is most likely the result of a scribal error as...
Qui si dimostra la natura della vite e di sua lieva, e chome ella debbe più tosto esercitare <in is> in tirare che in ispingiere. E chom’ella fa più for-
ca a essere semplice che doppia, e setette che grossa, 
5 essendo messa da pari lunghezza di lieva e pari forca.

E chosì si farà un pocho di discorso in qua(n)tì modi si
pò adoper(are), e di qua(n)tì sorte si pò fare viti sança
fine. E qua(n)tì moti son fatti sança vite, che far(n)-
no p(r)opio ofitio di vite. E in che modo la vite
10 sança fine s’achopagni cholle rote derivate, e
chome molte viti si debono insieme adoper(are).

E ssi dirà della natura delle sue madri, e sue so(n)
più utili cho· molti denti o noo. E sì dirà delle
viti retrose e delle viti che p(e) un medesimo ti-
15 rare spingano e tirano il peso, e di viti che
p(e) una sola volta che se le dia, farà fugire la sua
madre molte delle sue volte circolari. E così
moltissimi sua effetti, e varie fatiche, e fforteçe,

e tardi(a), e p(r)isteçe. E sì prov(ere)à ragion(e)1 <di ut>
20 di tutti loro oti e nature, e materie, e lieue,
e utilità. E sì dirà in che modo si debbono fare,
e del modo del metterle in o(p)era;
e di chi è stato inganato p(e) re(n) cognosce lor natura.

E talì strume(n)ti si figurera(n)no in gra(n) parte sança
25 le loro armadure, o altra cosa che avessi a inpe-

PAOLA MANNI

SULLA TERMINOLOGIA DELLE MACCHINE IN LEONARDO:
TRADIZIONE, INNOVAZIONE E SVILUPPI FUTURI*

* Le trascrizioni dai codici leonardiani sono fatte seguendo le norme stabilite da Arrigo Castellani
per l’edizione dei testi medievali, già utilizzate in Manni 2008 e in Manni & Biffi 2011. Alle pagine
introdotte di quest’ultimo (pp. xxxi-xxxii) si rimanda per una loro esposizione dettagliate e ulter-
ori riferimenti bibliografici. Nel caso di citazioni brevi inserite nel corpo del testo, si eliminano le
parentesi tonde che segnalano lo scioglimento delle abbreviazioni. Con la sigla Madrid I si indica il
primo codice di Madrid (Biblioteca Nacional de España, cod. 8937).

1 La e non chiara, corretta su altra lettera.
5: Diagrams from the critical edition of Francesco Maurolico’s Musica
Some fun before starting

6: More diagrams from the critical edition of Francesco Maurolico's *Musica*
Abstract
Introduction to \LaTeX{} and some of its tools

Some fun before starting

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Abstract
Introduction to \textsc{LATeX} and some of its tools

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Too many people mistake word processors (WPs) for typesetting systems (formerly DeskTop Publishing—DTP).
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Too many people mistake word processors (WPs) for typesetting systems (formerly DeskTop Publishing—DTP). The former have been programs that doubled a typewriter and evolved up to Word and LibreOffice Writer. The latter have been and are programs that help typesetters/typographers. Comparisons between them are meaningless as it is useless comparing a Ferrari against a Caterpillar. \TeX{} and \LaTeX{} are respectively a typesetting system and a macro package based on \TeX{.}
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The current majority of users just know (visual and) interactive programs. Such kind of typesetting systems are: Adobe InDesign, Quark XPress, Scribus... Non-interactive programs (and typesetting systems) act like HTML pages: you modify them and then you have to refresh the browser page to see the changes. \TeX{} (and \LaTeX{}) is a non-interactive typesetting system.
TEX As a Non-Interactive Typesetting System and a Programming Language

TEX is both a program (a compiler and a typesetter) and a programming language.
\TeX\ is both a program (a compiler and a typesetter) and a programming language. Its input is a program written in \TeX\ and its output is (not necessarily) a camera-ready document (DVI; PDF if the engine is pdf\TeX).
TEX As a Non-Interactive Typesetting System and a Programming Language

TEX is both a program (a compiler and a typesetter) and a programming language. Its input is a program written in TEX and its output is (not necessarily) a camera-ready document (DVI; PDF if the engine is pdfTEX).
It uses a specific font format, but some new macro packages (XƎLaTEX and LuaLaTEX, respectively based on XƎTeX and LuaTeX) use common TTF/OTF fonts.
TEX is both a program (a compiler and a typesetter) and a programming language. Its input is a program written in TEX and its output is (not necessarily) a camera-ready document (DVI; PDF if the engine is pdfTEX). It uses a specific font format, but some new macro packages (XeTEX and LuaTEX, respectively based on XETEX and LuaTEX) use common TTF/OTF fonts. TEX comes in distributions.
Writing a \TeX program normally implies to describe in detail every single page of the resulting document.
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Writing a \TeX program normally implies to describe in detail every single page of the resulting document. Leslie Lamport wrote a macro package (\LaTeX) to allow authors, not only typographers, to typeset professionally-looking documents. \LaTeX shifted the paradigm from page description to document structure description.
Why Text Is Better Than Binary?

The most part of \TeX\ files are pure text: easy to read, easy to edit.
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Now even commercial typesetting systems store source files using text format (specifically XML).
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\TeX\ started when Unicode was not even thought of.
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Now you can save your Unicode-encoded .tex files...
Now even commercial typesetting systems store source files using text format (specifically XML). \TeX started when Unicode was not even thought of. Now you can save your Unicode-encoded .tex files and check at least whether a file has been corrupted or not (of course with false negatives).
The normal compilation with \LaTeX is performed via command line (in a terminal):
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\texttt{latex document-name} (with or without extension)
Compiling a LaTeX document

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This command outputs a DVI file that will be converted into a PostScript document via \texttt{dvips}
The normal compilation with \LaTeX{} is performed via command line (in a terminal):
 latex document-name (with or without extension)
This command outputs a DVI file that will be converted into a PostScript document via dvips
Macro packages like pdf\LaTeX{} issue a PDF document.
Introduction to \LaTeX{} and some of its tools
Some fun before going on

Guess What! (First Serving)

Some other pages.
a suffcientemente grande


tale che da un certo punto in poi

La relazione è definita come "≤" e "<"; che equivale a dire, se

b = lim a_n a' ≤ lim a'_n

Se b' 5 a e se solo se 3ε > 0 Γlim n→∞ |a_n − a'_n| < ε.

Ora per ogni elemento r che scegliamo per indicare la successione costante

{r, r, . . .}. Sia b = lim a_n, e per ogni elemento r b con la successione

( a_n ) si tratta di dimostrare che per ogni ε > 0 (ci si può ristabilir esse

rationali, altrimenti da un certo punto in poi) b − (a_n) ∈ ε, che costringe solo relazioni e

operazioni algebriche già definite per i numeri razionali. (b − (a_n)) ∈ ε significa che

lim m→∞ |m (a_n) − (a'_m)| < ε).

Si scrive la successione (a'_n) è di Cauchy, per ogni ε > 0

lim m→∞ |m (a'_m) − (a'_m)| < ε,

quindi

lim m→∞ |m (a'_m) − (a'_m)| < ε, (a_n) ∈ (a'_m),

che è quella che si vuole dimostrare.

Si noti che viceversa, se b = lim a_n e la successione (a'_n) è tale che ∀ε > 0 Γlim n→∞ |m (a'_m) − (a'_m)| < ε allora, prendendo ε/2 che ε e in lim a_n se ha per il

sufficientemente grande |a_n − a'_n| ∈ ε, da cui lim a'_n = b.
8: Geometric diagrams from the critical edition of Francesco Maurolico’s *Optica*
Encaissement

Ce graphique présente une estimation de vos actifs à partir d’aujourd’hui et jusqu’à votre retraite. Tous les REER sont convertis en FERR à l’âge de 80 ans et sont sujets à des retraits minimums.

Décaissement

Ce graphique montre de quelle façon vos actifs seront utilisés pour atteindre vos objectifs de revenus à la retraite. Tous les REER seront convertis en FERR à l’âge de 80 ans et seront sujets à des retraits minimums. L’ordre de décaissement est le suivant : placement non enregistrés, CELI et placement enregistrés.
11: The dust cover jacket of one of the authors’ book
Introduction to \LaTeX{} and some of its tools

Some fun before going on

12: One page from Free Software Magazine n. 7 (camera ready for Lulu.com)
A \LaTeX document contains the whole text to be typeset along with the instructions necessary to typeset it.
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1. a preliminary part of code—the preamble (approximately like C preprocessor directives)
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1. a preliminary part of code—the preamble (approximately like C preprocessor directives)
2. the document content—the main body (approximately like the C functions)
\documentclass[a4paper,11pt]{article}
\usepackage{mdwlist}
\begin{document}
\begin{itemize*}
\item Hello, world!
\item \textit{Hello, world!}
\item \textbf{Hello, world!}
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The Structure of a \LaTeX Document (part II)

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Its mandatory argument
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List here the packages you load (possibly including those about encodings and languages) and your custom commands
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\end{itemize*}
\end{document}

You may probably want to add data about document title, author and date.
Introduction to \LaTeX\ and some of its tools

The Structure of a \LaTeX\ Document (part II)

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\end{itemize*}
\end{document}

This command begins the document \textit{environment} and opens the main body.
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\end{itemize*}
\end{document}
```

A begun environment must end. This one closes the main body and, subsequently, the \LaTeX{} document.
Spaces, Special Characters and Diacritic Marks

Hello, \_world! → Hello, world!
Spaces, Special Characters and Diacritic Marks

Hello, world! → Hello, world!
Hello, world! → Hello, world!
Spaces, Special Characters and Diacritic Marks

Hello,\␣world! → Hello, world!
Hello,\␣␣␣world! → Hello, world!
Hello,~world! → Hello, world!
Spaces, Special Characters and Diacritic Marks

Hello,_{world}! → Hello, world!
Hello,_{_{world}}! → Hello, world!
Hello,~world! → Hello, world!
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Spaces, Special Characters and Diacritic Marks

Hello, world! → Hello, world!
Hello, world! → Hello, world!
Hello, ~world! → Hello, world!
Hello, \ world! → Hello, world!
Hello, \, world! → Hello, world!
Spaces, Special Characters and Diacritic Marks

Hello, \_ world! → Hello, world!
Hello, \_ \_ \_ world! → Hello, world!
Hello, \~ world! → Hello, world!
Hello, \ \ \ \ world! → Hello, world!
Hello, \, , world! → Hello, world!

A blank line starts a new paragraph. \ \ starts a new line, just like \newline. Both maintain the broken line left aligned while \linebreak justifies it. \newpage starts a new page.
Spaces, Special Characters and Diacritic Marks

Hello,₁world! \rightarrow Hello, world!
Hello,ᵋᵋᵋworld! \rightarrow Hello, world!
Hello,~world! \rightarrow Hello, world!
Hello,₁\₁world! \rightarrow Hello, world!
Hello,₁,world! \rightarrow Hello, world!

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Dash (aka hyphen): - -   En-dash: -- –   Em-dash: --- —
Spaces, Special Characters and Diacritic Marks

Hello, \_world! \rightarrow Hello, world!
Hello, \_\_\_world! \rightarrow Hello, world!
Hello, ~world! \rightarrow Hello, world!
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Spaces, Special Characters and Diacritic Marks

Hello, world! → Hello, world!
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Ellipsis: \ldots

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Quotes: ```“ ”' ’ '' ‘’ ”’ « »>
Ellipsis: \ldots...

Diacritic marks: \`a à (but of course directly entering à is possible).
Altering the Text Look and Font

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\end{itemize*}
\end{document}

This command italicizes the text. The alternative command \textit{} emphasizes the text.
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The Structure of a \LaTeX Document (part II)

Altering the Text Look and Font

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```

This one slants the text.
Altering the Text Look and Font

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\item \textsf{Hello, world!}
\end{itemize*}
\end{document}

Writes the specified text in sans serif (the command \textsf{} writes the specified text in serif).
Altering the Text Look and Font

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\begin{document}
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\end{itemize*}
\end{document}

Writes the specified text in teletype (or typewriter typeface, or monospace).
The commands we’ve just seen are *transitory* because they change the default text property (normally upright normal roman) for the specified text.
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Of course we can use *permanent* commands: those commands that permanently change text properties.
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\texttt{textrm} → \texttt{rmfamily}
The commands we’ve just seen are *transitory* because they change the default text property (normally upright normal roman) for the specified text.

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\texttt{\texttt{textrm} \rightarrow \texttt{rmfamily}}

\texttt{\texttt{textsf} \rightarrow \texttt{sffamily}}
The commands we’ve just seen are *transitory* because they change the default text property (normally upright normal roman) for the specified text. Of course we can use *permanent* commands: those commands that permanently change text properties.

textrm → rmfamily

textsf → sffamily

textrtt → ttfamily
Altering the Text Look and Font

The commands we’ve just seen are *transitory* because they change the default text property (normally upright normal roman) for the specified text. Of course we can use *permanent* commands: those commands that permanently change text properties.

- `\textrm` → `\rmfamily`
- `\textsf` → `\sffamily`
- `\texttt` → `\ttfamily`
- `\textup` → `\upshape`
The commands we’ve just seen are \emph{transitory} because they change
the default text property (normally upright normal roman) for the
specified text.
Of course we can use \emph{permanent} commands: those commands that
permanently change text properties.
textrm → rmfamily
textsf → sffamily
texttt → ttfamily
textup → upshape
textit → itshape
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textrm → rmfamily
textsf → sffamily
texttt → ttfamily
textup → upshape
textit → itshape
textbf → bfseries (mdseries to revert it)
Altering the Text Look and Font

The commands we’ve just seen are *transitory* because they change the default text property (normally upright normal roman) for the specified text. Of course we can use *permanent* commands: those commands that permanently change text properties.

textrm $\rightarrow$ rmfamily
textsf $\rightarrow$ sffamily
texttt $\rightarrow$ ttfamily
textup $\rightarrow$ upshape
textit $\rightarrow$ itshape
textbf $\rightarrow$ bfseries (mdseries to revert it)
textsc $\rightarrow$ scshape
The commands we’ve just seen are *transitory* because they change the default text property (normally upright normal roman) for the specified text. Of course we can use *permanent* commands: those commands that permanently change text properties.

\begin{verbatim}
textrm \rightarrow \text{rmfamily}
textsf \rightarrow \text{sffamily}
texttt \rightarrow \text{ttfamily}
textup \rightarrow \text{upshape}
textit \rightarrow \text{itshape}
textbf \rightarrow \text{bfseries} (\text{mdseries} to revert it)
textsc \rightarrow \text{scshape}
textsl \rightarrow \text{slshape}
\end{verbatim}
\LaTeX\ justifies text by default.
\LaTeX{} justifies text by default. We can permanently change the default behavior using the commands \texttt{\centering}, \texttt{\raggedright} (to left align) and \texttt{\raggedleft} (to right align) or can transitorily change the default behavior using the environments \texttt{center}, \texttt{flushleft} and \texttt{flushright}.
\LaTeX{} justifies text by default. We can permanently change the default behavior using the commands `\centering`, `\raggedright` (to left align) and `\raggedleft` (to right align) or can transitorily change the default behavior using the environments `center`, `flushleft` and `flushright`.

While we can change the page geometry assigning different values to \LaTeX{} internal variables, it’s much easier to use the package geometry.
\LaTeX{} provides us with environments
\LaTeX\ provides us with environments to quote text: quote (for single paragraph) and quotation (for more than one paragraph);
\LaTeX provides us with environments
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to write poetry: verse;
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to write poetry: verse;
to add source code: verbatim;
\LaTeX{} provides us with environments to quote text: quote (for single paragraph) and quotation (for more than one paragraph); to write poetry: verse; to add source code: verbatim; to typeset lists: itemize (bulleted), enumerate (numbered), description (labeled).
Special Features

\documentclass[a4paper,11pt]{article}
\usepackage{mdwlist}
\begin{document}
\begin{itemize*}
  \item Hello, world!
  \item \textit{Hello, world!}
  \item \textbf{Hello, world!}
  \item \textsc{Hello, world!}
  \item \textsl{Hello, world!}
  \item \textsf{Hello, world!}
  \item \texttt{Hello, world!}
\end{itemize*}
\end{document}

This environment encloses a bulleted list. The starred version is only possible using the package mdwlist.
\documentclass[11pt,a4paper]{article}
\usepackage[french,english]{babel}
\usepackage{imakeidx}
\newcommand{\italics}[1]{\textit{#1}}
\renewcommand{\italics}[1]{\textbf{#1}}
\hyphenation{Gian-lu-ca, Mas-si-mi- lia-no}
\begin{document}
\tableofcontents
\section{\label{sec:first} First section}
\section{Second section}
In the section~\ref{sec:first} (page~\pageref{sec:first})...

This hard-to-hy\-phen-ate \index{Word}word...

\foreignlanguage{french}{«Je suis l'inspecteur Clouseau de la Sûreté!»}
\printindex
\end{document}
Special Features

\documentclass[11pt,a4paper]{article}
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\newcommand{\italics}[1]{\textit{#1}}
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\foreignlanguage{french}{«Je suis l'inspecteur Clouseau de la Sûreté!»}
\printindex
\end{document}
Introduction to \LaTeX{} and some of its tools

The Structure of a \LaTeX{} Document (part II)

Special Features

\documentclass[11pt,a4paper]{article}
\usepackage[french,english]{babel}
\usepackage{imakeidx}
\newcommand\italics[1]{\textit{#1}}
\renewcommand\italics[1]{\textbf{#1}}
\hyphenation{Gian-lu-ca, Mas-si-mi-li-a-no}
\begin{document}
\tableofcontents
\section{First section}
\section{Second section}
In the section~\ref{sec:first} (page~\pageref{sec:first})...
\begin{foreignlanguage}{french}{«Je suis l'inspecteur Clouseau de la Sûreté!»}
\end{foreignlanguage}
This hard-to-hyphenate \index{Word}word...
\printindex
\end{document}
Special Features

\documentclass[11pt,a4paper]{article}
\usepackage[french,english]{babel}
\usepackage{imakeidx}
\newcommand\italics[1]{\textit{#1}}
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\begin{document}
\tableofcontents
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\printindex
\end{document}
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\printindex
\end{document}
\LaTeX{} has environments (figure and table) to avoid that an author inserts those elements into fixed positions in a document.
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\LaTeX \ has \ environments \ (figure \ and \ table) \ to \ avoid \ that \ an \ author \ inserts \ those \ elements \ into \ fixed \ positions \ in \ a \ document. \ Those \ environments \ can \ be \ captioned \ and \ labeled \ for \ future \ references \ in \ the \ document. \ We’ll \ probably \ insert \ already \ made \ images \ into \ the \ figure \ environment \ with \ \texttt{\includegraphics} \ (\texttt{graphicx} \ package)—Agostino \ De \ Marco’s \ lesson \ will \ show \ you \ more \ complex \ ways—and \ tabular \ material \ into \ the \ table \ environment.
Colors and Other Special Characters

Thanks to the (x)color package(s) we can:
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Colors and Other Special Characters

Thanks to the \texttt{(x)color} package(s) we can:
\begin{verbatim}
  color text;
  highlight text ;
\end{verbatim}
Colors and Other Special Characters

Thanks to the (x)color package(s) we can:
\begin{itemize}
  \item \texttt{color text};
  \item \texttt{highlight text};
  \item color pages (\texttt{\pagecolor{color}}; \texttt{\nopagecolor} to halt the process).
\end{itemize}
Thanks to the (x)color package(s) we can:
- color text;
- highlight text;
- color pages (\textcolor{color}; \textcolor{nopagecolor} to halt the process).

Some characters are reserved. We can use them thanks to special commands: e.g., \$, \&, \textbackslash → $, &, \\. 

Since \LaTeX was born to help authors writing coherent documents, the document structure is fundamental. E.g.,

![Diagram of document structure]

- **book**
  - **part**
    - **chapter**
     - **section**
      - **subsection**
    - : 
  - **part**
    - : 
    - : 

Splitting Big Documents

If your document is large, you don’t need to write a large file.
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Inclusion 1: `\include{<filename>}`
If your document is large, you don’t need to write a large file. You can write a master file and include in it several small slave files.

Inclusion 1: `\include{<filename>}`
Inclusion 2: `\input{<filename>}`
Help, I Need a Symbol

An important document lists the symbols we can typeset with \LaTeX: *The Comprehensive \LaTeX Symbol List* by Scott Pakin.
An important document lists the symbols we can typeset with \LaTeX: \textit{The Comprehensive \LaTeX Symbol List} by Scott Pakin. It’s thick and has too much symbols. Can we easily locate a specific one?
An important document lists the symbols we can typeset with LaTeX: *The Comprehensive \LaTeX{} Symbol List* by Scott Pakin. It’s thick and has too much symbols. Can we easily locate a specific one? *Detexify* allows us to draw a symbol and get back the list of possible \LaTeX{} commands that show that symbol or character.
Guess What! (Dessert)

Last pages.
Introduction to \LaTeX and some of its tools

Some fun before the latest topics

13: Another page from Free Software Magazine n. 7
14: Prospettiva Persona editorial rules
Introduction to \LaTeX{} and some of its tools
Some fun before the latest topics

15: A page from the journal Prospettiva Persona
Introduction to \LaTeX\ and some of its tools
Some fun before the latest topics

16: A François Dolbeau critical edition
17: A parallel translation (Armenian-Italian) published in Augustinianum
\LaTeX\ users don’t need a special editor to edit their documents.
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(Not Necessarily) Dedicated Editors

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\LaTeX\ users don’t need a special editor to edit their documents. Nevertheless, such editors exist. They’re more IDEs than just editors because they highlight, autocomplete, compile and show. Even a Web site allows users to collaboratively edit \LaTeX\ documents: Overleaf. The only WYSIWYG editor seems to be \TeX\macs. Inspired by Emacs and \TeX, it is declared totally unrelated to them.
LyX, the WYSIWYG (?) Editor that \LaTeXs Your Documents

LyX is more a WYSIWYM editor than a WYSIWYG one.
LYX, the WYSIWYG (?) Editor that LaTeXs Your Documents

LYX is more a WYSIWYM editor than a WYSIWYG one. Some stuff is shown as if compiled with LaTeX, other isn’t.
\textbf{LyX}, the WYSIWYG (?) Editor that \LaTeX\s Your Documents

LyX is more a WYSIWYM editor than a WYSIWYG one. Some stuff is shown as if compiled with \LaTeX, other isn’t. But it provides you with a lot of \LaTeX classes and packages, and allows direct \LaTeX commands input.
introduction to \LaTeX{} and some of its tools
\LaTeX{}, the WYSIWYG (?) Editor that \LaTeX{}s Your Documents

\LaTeX{}, the WYSIWYG (?) Editor that \LaTeX{}s Your Documents

\LaTeX{} is more a WYSIWYM editor than a WYSIWYG one. Some stuff is shown as if compiled with \LaTeX{}, other isn’t. But it provides you with a lot of \LaTeX{} classes and packages, and allows direct \LaTeX{} commands input. Its buttons ease the input of index and bibliography commands.
Introduction to \LaTeX{} and some of its tools

\textbf{\LaTeX}, the WYSIWYG (?) Editor that \LaTeX{}s Your Documents

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\LaTeX{} is more a WYSIWYM editor than a WYSIWYG one. Some stuff is shown as if compiled with \LaTeX{}, other isn’t. But it provides you with a lot of \LaTeX{} classes and packages, and allows direct \LaTeX{} commands input. Its buttons ease the input of index and bibliography commands. The file it saves is not a \LaTeX{} file, but \LaTeX{} easily exports such format or a PDF file.
Guess What! (The Bill, Please!)

Now that we reached the end of this lesson, let’s see the test results.
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Did somebody of you answer 17 As?
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Did somebody of you answer 17 Bs?
Guess What! (The Bill, Please!)

Now that we reached the end of this lesson, let’s see the test results.
Did somebody of you answer 17 As?
Did somebody of you answer 1 or more Bs?
Did somebody of you answer 17 Bs?
Guess What! (The Bill, Please!)

Now that we reached the end of this lesson, let’s see the test results.
Did somebody of you answer 17 As?
Did somebody of you answer 1 or more Bs?
Did somebody of you answer 17 Bs?
Only those of you who answered 17 Bs “won” the test. The others now know that \texttt{\LaTeX} is more powerful and versatile than you may figure out.
This very 0\textsuperscript{th} lesson should have given you all (at least those of you who are not yet proficient with \LaTeX) the chance to understand the subsequent lessons.
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This very 0\textsuperscript{th} lesson should have given you all (at least those of you who are not yet proficient with $\LaTeX$) the chance to understand the subsequent lessons. Of course, reading the related paper will be much more helpful. Any questions?
This very 0\textsuperscript{th} lesson should have given you all (at least those of you who are not yet proficient with \LaTeX) the chance to understand the subsequent lessons. Of course, reading the related paper will be much more helpful. Any questions? Thank you for your attention. Enjoy the next lessons.