1 Document Class

1.1 Report

`\documentclass[11pt,a4paper]{report}`
permite definirea Capitolelor, permite `\maketitle` (dar informatiile cu Titlu si Autor apar pe o pagina separata de restul PDF-ului), permite mediul abstract:
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1.2 Article

`\documentclass[11pt,a4paper]{article}` OIDA

1.3 Book

`\documentclass[11pt,a4paper]{book}`
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2 Packages

1. Math:
   `\usepackage {amsmath}` or `\usepackage {mathtools}`
   `\usepackage {amssymb}`
   `\usepackage {amsfonts}`
   `\usepackage {mathrsfs}` $\notin \mathscr{C}$

2. Color:
   `\usepackage {color}`

3. Images:
   `\usepackage {graphicx}`
   `\usepackage {epstopdf}`

4. Unicode - fancy quotes:
   `\usepackage[T1]{fontenc}`
   `\usepackage[utf8]{inputenc}` $\notin \mathscr{C}$

5. Index requires Ctrl-Shift-I in OIDA: `\usepackage {makeidx}`

6. Hyper references:
   `\usepackage {hyperref}`

7. Colums: $\notin \mathscr{C}$
   `\usepackage {multicol}`

8. Setting title formatting (font size, centering, etc.):
   `\usepackage {sectsty}`

3 Package ussage

3.1 Fancy Quotes - `\usepackage [T1]{fontenc}`

,, might work instead of `\quotedblbase`. *% ,,Hello''*.

`\quotedblbase`	„	Double low-9 quotation mark
`\quotesinglbase`	‚	Single low-9 quotation mark
`\guillemetleft`	«	Left-pointing double angle quotation mark
`\guillemetright`	»	Right-pointing double angle quotation mark
`\guilsinglleft`	‹	Single left-pointing angle quotation mark
`\guilsinglright`	›	Single right-pointing angle quotation mark

3.2 Centering and seting font sizes - `\usepackage {sectsty}`

Quick Usage:
```
\chaptertitlefont{\centering\LARGE}
\sectionfont{\Large}
```

Tl;dr - executes ... before printing whatever it says
Long list: $\notin \mathscr{C}$
```
\allsectionsfont{...}              \subparagraphfont{...}
\partfont{... }                    \minisecfont{...}
\chapterfont{...}                  \partnumberfont{...}
\sectionfont{...}                  \parttitlefont{...}
\subsectionfont{...}               \chapternumberfont{...}
\subsubsectionfont{...}            \chaptertitlefont{...}
\paragraphfont{...}
```

3.3 Dots

```
\usepackage{tocloft}
\renewcommand{\cftchapleader}{\cftdotfill{\cftdotsep}}
```

3.4 Colors:

```
% requires \usepackage{hyperref}
\hypersetup{colorlinks=true, linkcolor=cyan, citecolor=green,
  filecolor=black, urlcolor=blue}
```

Define colors:
```
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```

4 Romanian Names

4.1 Quick way $\notin \mathscr{C}$

```
\usepackage[romanian]{babel}
```

4.2 Long way

```
\renewcommand{\contentsname}{Cuprins}
\renewcommand{\chaptername}{Capitolul}
\renewcommand{\bibname}{B\lowercase{ibliografie}}
\renewcommand{\appendixname}{Anexa}
\renewcommand{\indexname}{I\lowercase{ndice}}
```

5 New Commands ∉ 𝒞

```latex
\newcommand{\lab}[1]{
  \section*{Laborator #1}
  \addcontentsline{toc}{section}{Laborator #1}
}

\usepackage{xparse}
% O, o optional, m= mandatory
\DeclareDocumentEnvironment{problema}{O {1} o m}{
  \begin{enumerate}[leftmargin=*]
    \addtocounter{enumi}{#1}
    \item
}{
  \end{enumerate}
  \IfValueT{#2}{\cppcode{#2}}
}
```

6 Fancy Headers

```latex
\pagestyle{fancy} % inside the document
```
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7 Page Layout

7.1 Quick way ∉ 𝒞

```latex
\usepackage {geometry}
\geometry{a4paper,left=30mm,right=20mm,top=20mm,bottom=30mm}
```

7.2 Other way

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8 Symbols

8.1 The bane of students

| `$\backslash$` `\textbackslash` | \ | backslash |
| `\LaTeX` | LaTeX | *that* symbol |

8.2   Diacritics

`\^{a}`	â	circumflex
`\i \j`	ıȷ	dotless i and j
`` \`{o} ``	ò	grave accent
`\'{o}`	ó	acute accent
`\^{o}`	ô	circumflex
`\"{o}`	ö	umlaut, trema or dieresis
`\H {o}`	ő	long Hungarian umlaut (double acute)
`\~{o}`	õ	tilde
`\c {c}`	ç	cedilla
`\k {a}`	ą	ogonek
`\l {}`	ł	barred l (l with stroke)
`\={o}`	ō	macron accent (a bar over the letter)
`\b {o}`	o̲	bar under the letter
`\.{o}`	ȯ	dot over the letter
`\d {u}`	ụ	dot under the letter
`\r {a}`	å	ring over the letter
`\u {o}`	ŏ	breve over the letter
`\v {s}`	š	caron/háček
`\t {oo}`	o͡o	"tie" (inverted u) over the two letters
`\o`	ø	slashed o (o with stroke)
`\ss`	ß	scharfes S

9   Spacing

9.1   Vertical (that way ↓)

`\par` - Next paragraph (like `\\` but with indent)
`\newpage \pagebreak \clearpage` - duh
`\smallskip \medskip \bigskip` - duh
`\cleardoublepage` - in book mode goto next odd page
`\\[10cm] \vspace{10pt}` - vertical space of height (might require newline after)

9.2   Horizontal (that way →)

`\-` - hyphenation point
e.g. `Panzer\-kampf\-wagen VI Tiger Aus\-füh\-rung B ,,Königs\-tiger''` - Panzerkampf-wagen VI Tiger Ausf. B „Königstiger"

`\hspace{10pt}` - exact unit - might be negative M`\hspace{-9pt}`M - M
`\!` - negative space
`\thinspace \medspace \thickspace` ⟺ `\,`, `\:` `\;` - duh
`~ \ \quad \qquad` - bigger
e.g. `a\, b\: c\; d~e\ f\quad g\qquad h` - a b c d e f g   h

9.3   Line spacing

`\linespread{1.3}` *% ~1.5*
`\linespread{1.6}` *% ~2*
`\setstretch{2}` *% 2*

10 ~~Pointless~~ Miscellaneous

Striketrough:
<code>\usepackage {ulem}</code>
<code>\sout{...}</code>
    Units:

pt - a point is 1/72.27 inch, that means about 0.351 mm in non freedom units

mm - millimeter

cm - centimeter

in - inch

ex - roughly the height of an "x" in the current font

em - roughly the width of an "M" (uppercase) in the current font