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# Getting started with $\text{\LaTeX}$

## Dealing with errors



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The screenshot shows a LaTeX editor window with a document containing several errors. The errors are highlighted in red in the source code, and the message log at the bottom provides details for each error.

**Source Code Snippets:**

```

21 \section{Need for finite aftercare of landfills}
22
23
24
25 The earliest recovered evidence of human (Native Americans) waste production is from around 6500 BC ).
26 The first organized municipal dump was created in 500 BC (Athens, Ancient Greece) & with the requirement that the
27 waste was deposited at least 1.6 km away from the city, although the history of landfilling starts in such early times,
28 it was not until recently (1930) that humanity realized the dangers of dumping waste in open pits, and that waste
29 management had to be improved. \\ \indent
30
31 The rapid population growth results in an increase of waste production. Studies have indicated that waste production
32 will double within the next 20 years. Waste production is strongly correlated to the gross national income (GNI) of
33 each country. Residents in countries with a higher GNI (developed countries) produce/buy/use more material, and hence
34 dispose more waste compared to residents in countries with a lower GNI (developing countries). On the other hand, since
35 the 60's or the last century developed countries collect and treat their waste to a greater extent than developing
36 countries. \autoref{fig1} shows a comparison of developed and developing countries with respect to their waste
37 generation and collection. \\ \indent
38 Waste composition differs by country as well. For example, developed countries produce more paper, plastic and glass
39 waste, whereas developing countries produce more organic and food waste. These differences per country enhance the
40 complexity of the waste management problem. \\ \indent
41 \begin{figure}
42 \caption{Figure 1.1}
43 \includegraphics[width=1\textwidth]{2}
44 \end{figure}
45
46 \section{Details}
47 \label{section:2}
48
49 Landfill emissions (e.g., gas - mainly \texorpdfstring{CH\textrm{subscript}{4}}{CH4} - and leachate) are harmful for the human
50 health and the environment (\ref{section:1}). For example, landfills are responsible for around 18 \% of the global
51 anthropogenic \texorpdfstring{CH\textrm{subscript}{4}}{CH4} production. For the reduction of landfill emissions, regulations
52 from the United Nations state that priority of all countries should be: (1) to reduce waste production; (2) to reuse
53 material; (3) to recycle materials; (4) to convert waste to energy; (5) and finally, if all above fail, to landfill the
54 waste. Although landfilling is the last option for waste management nowadays, it still takes place: a number of
55 materials cannot be recycled, combusted or reused and for those landfilling is the best option. In addition, many
56 developing countries have no other option but continue landfilling, as any other action would be too expensive to
57 realize. European countries are some of the few exhibiting a decreasing landfilling rate, as they try to follow the

```

**Message Log:**

File	Type	Line	Message
Module_5_Exercise3_errors.tex	error	line 25	Too many %'s. ... waste production is from around 6500 BC )
Module_5_Exercise3_errors.tex	error	line 26	Malplaced alignment tab character & ...ated in 500 BC (Athens, Ancient Greece) &
Module_5_Exercise3_errors.tex	error	line 32	File 'Z' not found. \includegraphics[width=1\textwidth]{2}
Module_5_Exercise3_errors.tex	error	line 39	Undefined control sequence. ...rily \texorpdfstring{CH\textrm{subscript}{4}}{CH4}
Module_5_Exercise3_errors.tex	error	line 39	Undefined control sequence. ...enic \texorpdfstring{CH\textrm{subscript}{4}}{CH4}
Module_5_Exercise3_errors.tex	error	line 44	Missing & inserted. \NRMS=leave!

**Additional Messages:**

- ! Too many %'s.
- ! 25 ... waste production is from around 6500 BC )
- You've closed more groups than you opened.
- Such boobos are generally harmless, so keep going.
- ! Malplaced alignment tab character &.
- ! 26 ...ated in 500 BC (Athens, Ancient Greece) &
- ... with the requirement that...

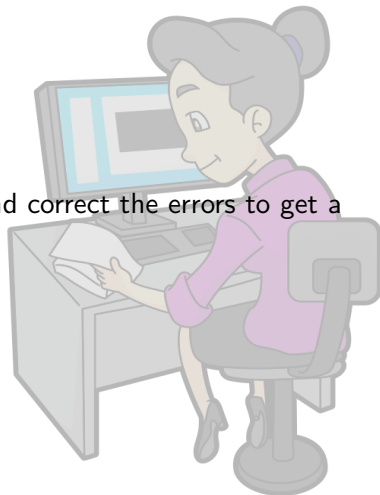
Message	Meaning
!Undefined control sequence	Wrong command (likely a typo)
!Too many}'s	Mistake in number of }
Not in Mathematics Mode (e.g., !Missing \$ inserted)	Mistake in math mode opening
Runaway argument?	Opposite to "!"Too many}'s"
Missing package	L <sup>A</sup> T <sub>E</sub> X does not find some package

## Dealing with errors

### Warnings

Message	Meaning
... is not required with releases after 2005...	Package already included
Citation '...' on page ... undefined on input line...	Citation not defined in the bibliography file
No \author given	Warning of the \maketitle command, when an author is missing
Overfull \hbox	The line could not be broken in a reasonable way so it extended into the margin (try to add hyphens)
Underfull \hbox	The spacing may exceed the currently permitted maximum (check if you have forced a line break)

Open the file `Exercise_3/ex3_errors.tex` and find and correct the errors to get a compiling document.



Slide 5 backgorund image: Free Clip Art

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<https://creativecommons.org/licenses/by-sa/4.0/legalcode>