

This is the title of the document

You can put your name here

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1 This is a section

Contents of an article in LaTeX are divided by *parts*, *chapters*, *sections*, *subsections* and *subsubsections*, you will use one or another depending of the size and the format of your documents.

In the article document class section is the biggest structural element, from there you can make subsections and subsubsections.

To end paragraphs let an empty line or write the *par* command, every commands or environment start with a backslash.

1.1 Commands

They are just rules that change the behaviour of the text or are used to add a special symbol for example we can write \LaTeX , or make *emphasis* in some words or sentences to express their **importance**.

1.2 Environments

Commands are useful but they get short when writing a document, it is impossible to write long essays just with small declarations, here is where the *environments* complete the puzzle, it can be seen as a block or container that give us a context for a specific situation like writing equations, adding pictures or making a table. Here are some of their advantages:

- Different environments allow to encapsulate commands for different contexts.
- They focus you on the job, it's easier to write equations or lists once the appropriate context is defined.

- Environments extend the availability of documents you can write.

With environments is possible to write complex equations like:

$$X(j\omega) = \int_{-\infty}^{\infty} x(t)e^{-j\omega t} dt$$
$$x(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} X(j\omega)e^{j\omega t} d\omega$$

and making tables:

time (sec)	temperature ($^{\circ}C$)
0	40
1	41
2	42
3	37
4	43
5	46

without worrying about how to set the font or spaces to make it look great.