

This lesson shows how to change the spacing elements in a document and how to add explicit formatting instructions to the LaTeX source.

We have already seen that a blank line in your input will generate a new paragraph in LaTeX. This shows up as the paragraph will start with an indent.

## 1 Paragraph spacing

One common style is to have no indents for paragraphs, but instead to have a ‘blank line’ between them. We can achieve that using the `parskip` package.

```
\usepackage[parfill]{parskip}
\usepackage{lipsum} % Just for some filler text
\begin{document}
\lipsum
\end{document}
```

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## 2 Forcing a new line

Most of the time, you should not force a new line in LaTeX: you almost certainly want a new paragraph or to use `\parskip`, as we’ve just seen, to put a ‘blank line’ between paragraphs.

There are a few places where you use `\\` to start a new line without starting a new paragraph:

- At the end of table rows
- Inside the center environment
- In poetry (the verse environment)

Almost always, if you are not in one of those special places, you should not use `\\`.

## 3 Adding explicit space

We can insert a thin space (about half the normal thickness) using `\,`. In math mode, there are also other commands: `\.`, `\:` and `\;`, and one for a negative space: `\!`.

Very rarely, for example when creating a title page, you might need to add explicit horizontal or vertical space. We can use `\hspace` and `\vspace` for that.

## 4 Explicit text formatting

We wrote in lesson 3 that most of the time logical structure is preferable. But sometimes you want to make text bold, or italic, or monospaced, etc. There are two types of command for this: ones for short pieces of text, and ones for ‘running’ material.

For short bits of text, we use `\textbf`, `\textit`, `\textrm`, `\textsf`, `\texttt` and `\textsc`.

For running text, we use commands that alter the font setup; the commands here are for example `\bfseries` and `\itshape`. Because these don’t ‘stop’, we need to place them in a group if we want to prevent them from applying to the whole document. LaTeX environments are groups, as are table cells, or we can use `{...}` to make an explicit group.

```
\begin{document}
Normal text.
```

```
{\itshape
```

```
This text is italic.
```

```
So is this: the effect is not limited to a paragraph.
```

```
}
\end{document}
```

---

Normal text.

*This text is italic.*

*So is this: the effect is not limited to a paragraph.*

---

We can set font size in a similar way; these commands all work on an ongoing basis. The sizes we set are relative: `\huge`, `\large`, `\normalsize`, `\small` and `\footnotesize` are common. It's important to finish a paragraph before changing the font size back; see how we add an explicit `\par` (paragraph break) here.

```
\begin{center}
{\itshape\large Some text\par}
Normal text
{\bfseries\small Much smaller text\par}
\end{center}
```

*Some text*

Normal text **Much smaller text**