# An Example Document

## Leslie Lamport

## January 21, 1994

This is an example input file. Comparing it with the output it generates can show you how to produce a simple document of your own.

# 1   Ordinary Text

The ends of words and sentences are marked by spaces. It doesn't matter how many spaces you type; one is as good as 100. The end of a line counts as a space.

One or more blank lines denote the end of a paragraph.

Since any number of consecutive spaces are treated like a single one, the formatting of the input file makes no difference to LaTeX, but it makes a difference to you. When you use LaTeX, making your input file as easy to read as possible will be a great help as you write your document and when you change it. This sample file shows how you can add comments to your own input file.

Because printing is different from typewriting, there are a number

of things that you have to do differently when preparing an input file than if you were just typing the document directly. Quotation marks like "this" have to be handled specially, as do quotes within quotes: "'this' is what I just wrote, not 'that'".

Dashes come in three sizes: an intra-word dash, a medium dash for number ranges like 1–2, and a punctuation dash—like this.

A sentence-ending space should be larger than the space between words within a sentence. You sometimes have to type special commands in conjunction with punctuation characters to get this right, as in the following sentence. Gnats, gnus, etc. all begin with G. You should check the spaces after periods when reading your output to make sure you haven't forgotten any special cases. Generating an ellipsis ... with the right spacing around the periods requires a special command.

LaTeX interprets some common characters as commands, so you must type special commands to generate them. These characters include the following: $ & % # { and }.

In printing, text is usually emphasized with an *italic* type style.

*A long segment of text can also be emphasized in this way. Text within such a segment can be given* additional *emphasis.*

It is sometimes necessary to prevent LaTeX from breaking a line where it might otherwise do so. This may be at a space, as between the "Mr." and "Jones" in "Mr. Jones", or within a word—especially when the word is a symbol like *itemnum* that makes little sense when hyphenated across lines.

Footnotes[1] pose no problem.

---

[1]This is an example of a footnote.

LaTeX is good at typesetting mathematical formulas like $x - 3y + z = 7$ or $a_1 > x^{2n} + y^{2n} > x'$ or $(A, B) = \sum_i a_i b_i$. The spaces you type in a formula are ignored. Remember that a letter like $x$ is a formula when it denotes a mathematical symbol, and it should be typed as one.

# 2   Displayed Text

Text is displayed by indenting it from the left margin. Quotations are commonly displayed. There are short quotations

> This is a short a quotation. It consists of a single paragraph of text. See how it is formatted.

and longer ones.

> This is a longer quotation. It consists of two paragraphs of text, neither of which are particularly interesting.
>
> This is the second paragraph of the quotation. It is just as dull as the first paragraph.

Another frequently-displayed structure is a list. The following is an example of an *itemized* list.

- This is the first item of an itemized list. Each item in the list is marked with a "tick". You don't have to worry about what kind of tick mark is used.

- This is the second item of the list. It contains another list nested inside it. The inner list is an *enumerated* list.

1. This is the first item of an enumerated list that is nested within the itemized list.
2. This is the second item of the inner list. LaTeX allows you to nest lists deeper than you really should.

This is the rest of the second item of the outer list. It is no more interesting than any other part of the item.

- This is the third item of the list.

You can even display poetry.

There is an environment for verse
Whose features some poets will curse.

For instead of making
Them do *all* line breaking,
It allows them to put too many words on a line when they'd
    rather be forced to be terse.

Mathematical formulas may also be displayed. A displayed formula is one-line long; multiline formulas require special formatting instructions.

$$(\Gamma, \psi') = x'' + y^2 + z_i^n$$

Don't start a paragraph with a displayed equation, nor make one a paragraph by itself.

# 3   Lorem Ipsum

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut id dolor. Fusce pharetra dignissim pede. Vestibulum nec diam eu ipsum

cursus suscipit. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Pellentesque vel magna in pede porta venenatis. Vivamus condimentum massa ut lectus malesuada placerat. Nullam convallis accumsan erat. Suspendisse euismod risus viverra tellus congue congue. Ut tempus. Phasellus nec massa. Ut ornare viverra tortor. In non velit. Cras lacus. Pellentesque quis nulla. Sed ultricies fringilla velit. Donec in ligula quis massa condimentum vulputate.

Morbi quis elit. Nam rhoncus lorem quis eros. Etiam sagittis enim. Quisque egestas nunc nec risus. In mollis, elit auctor volutpat laoreet, quam leo varius dolor, et feugiat massa tellus dictum augue. Etiam ultricies. Mauris ut urna et orci gravida sollicitudin. In elit turpis, ultricies volutpat, aliquam at, accumsan in, nibh. Nulla facilisi. Mauris sed ipsum. Pellentesque porta. Ut porta. Cras eu mauris. Ut posuere rutrum nulla. Suspendisse nonummy eros id quam. Integer laoreet pede in magna. Quisque hendrerit tortor ullamcorper magna. Aenean semper lorem sed eros.

Suspendisse porttitor consequat mauris. Aenean convallis, sem eget semper adipiscing, ligula velit tincidunt lacus, sit amet bibendum augue augue in quam. Duis nibh. Vivamus condimentum dictum wisi. Sed eget enim. Quisque elementum, eros sed imperdiet feugiat, orci magna interdum est, ac vestibulum nisl pede nec lacus. Maecenas risus. Curabitur facilisis felis in sem. Fusce ut metus in nulla blandit pretium. Sed dui metus, viverra ut, dictum vitae, adipiscing non, est. Nam eros tortor, viverra et, euismod ornare, mollis eget, mi. Vestibulum eget mi vel nunc sagittis feugiat. Phasellus metus est, congue ut, venenatis quis, blandit in, sapien. Aliquam

erat volutpat.

Donec tincidunt. Ut sed nisl. Nam tellus. In pharetra tincidunt est. Nullam massa. Proin vulputate magna ac tellus pharetra fringilla. Phasellus id tortor vitae neque pharetra dignissim. Phasellus in nulla id diam ullamcorper facilisis. Proin libero sem, congue ut, tincidunt sed, venenatis ut, quam. Pellentesque eleifend lorem. Quisque ultricies. Duis vehicula. Mauris sem libero, feugiat sit amet, molestie sit amet, commodo non, risus. Mauris tempus. Praesent vitae sem. Fusce vitae lorem ac metus accumsan viverra. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Fusce libero massa, mattis quis, ultricies sit amet, feugiat ut, lectus.

Donec suscipit ante vel turpis. Cras fermentum pulvinar quam. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In nulla. Vivamus faucibus, risus eget tempus tincidunt, ipsum arcu pellentesque tortor, vitae eleifend lectus dui in eros. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Vestibulum orci enim, tristique sed, venenatis ac, bibendum non, metus. In hac habitasse platea dictumst. Donec felis erat, laoreet et, cursus vel, tristique ac, dolor. Sed interdum leo nec ligula. Aenean feugiat. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Maecenas ultrices imperdiet nulla. Mauris a est. Nullam luctus dignissim orci. Nunc scelerisque odio at turpis. Maecenas eu diam. Maecenas at est. Phasellus rhoncus, massa sed suscipit volutpat, dolor nulla auctor tortor, vitae fermentum nibh enim vitae enim. Nulla facilisi.

Proin tortor lorem, rutrum vitae, varius nec, rhoncus sit amet, lectus. Praesent sit amet eros. Morbi pede dolor, auctor ac, viverra ac,

vehicula ut, mauris. Suspendisse a diam non lectus lobortis facilisis. Curabitur ornare. Donec molestie varius felis. Mauris eleifend. Maecenas quis felis. Donec pretium vehicula arcu. In egestas arcu ut orci.

Etiam ac ipsum vel felis tincidunt condimentum. Nulla facilisi. Pellentesque tempor nulla egestas est. Cras nec ante in sem nonummy tempor. Nunc pulvinar risus quis lectus. Nam dolor mauris, fermentum sed, dictum et, molestie id, tortor. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent fermentum arcu ut mauris. Nullam in tellus. Etiam luctus. Curabitur in leo eget enim ultricies eleifend. Quisque eleifend consequat pede. Aenean commodo mauris nec velit. Aenean bibendum eros nec est. Curabitur ut nulla. Nam ac mauris eu lectus porttitor consectetuer.

Proin rhoncus, mi ut vulputate hendrerit, sem nunc mollis elit, vel suscipit lectus nulla ut diam. Proin eleifend imperdiet leo. In hac habitasse platea dictumst. Nullam ultricies quam vitae est. Maecenas augue. Phasellus congue, erat non porta consequat, magna felis pellentesque justo, at semper magna orci id mi. Vivamus id diam. Sed non est. Nullam augue. Aenean mollis suscipit erat.

Nunc gravida ipsum. Phasellus posuere. Integer vulputate hendrerit nunc. Vivamus sem odio, placerat nec, suscipit dapibus, euismod et, ligula. Praesent ornare commodo leo. Sed hendrerit mollis nulla. Curabitur accumsan. Praesent sed nibh ut orci consectetuer facilisis. Donec tellus purus, pellentesque et, feugiat vitae, aliquam id, metus. Nulla fringilla euismod eros. Mauris id odio. Maecenas ut ligula et justo aliquam interdum. Quisque tortor nulla, phare-

tra tempor, sodales a, dictum ut, massa. Etiam rutrum, augue vel aliquet placerat, lacus enim fermentum sapien, eget tristique tellus nisl eu nibh. Phasellus id odio in ante molestie eleifend. Nullam in tellus. Praesent consectetuer fermentum eros. Suspendisse facilisis adipiscing libero.

Nunc eu eros eget libero aliquam pretium. Sed mi orci, commodo ac, interdum non, tincidunt at, erat. Phasellus ut lectus. Fusce nunc. Vestibulum sagittis sollicitudin tellus. Nam laoreet, sem in ornare cursus, leo metus auctor nunc, eu aliquet magna quam ac felis. Donec lorem. Morbi aliquet convallis leo. Quisque faucibus ante quis arcu. Fusce mattis dapibus lorem. Aliquam ultricies nibh et erat. Curabitur blandit, neque eu condimentum blandit, enim neque mattis mauris, tempus pulvinar purus ligula suscipit massa. Aliquam hendrerit neque pellentesque odio. Etiam non felis. Pellentesque commodo orci at felis. Sed et orci. Vivamus malesuada lorem nec lorem. Donec augue magna, fermentum eget, porttitor id, imperdiet sit amet, risus. Mauris commodo justo ac erat. In non ipsum.[2]

---

[2]lipsum.com