# First Document and Tutorial\*

## Aviral Janveja

### July 3, 2019

## Contents

1	Introduction	3
2	Second Section 2.1 First Subsection	3 3
Uı	nnumbered Section	3
	We have now added a title, author and date to our first LATEX docume	nt!
	Italics Bold <u>Underline</u> .	
	Hi, This is an <i>emphasize</i> example.	
	Hi, This is another emphasize example.	
	Hi, This is yet another <i>emphasize</i> example. As you can see below on page 2, In figure 1, Sadhguru talks about lov	e.
	• The unordered list using bullet-points.	
	• The text in the entries may be of any length.	
	1. The first entry starts at one.	
	2. The list numbers increase with each new entry.	

<sup>\*</sup>Thanks to the overleaf team.



Figure 1: Sadhguru on Love and Lust.

In Physics, the mass-energy equivalence is stated by the equation  $E=mc^2$  discovered in 1905 by Albert Einstein.

The mass-energy equivalence is described by the famous equation

$$E = mc^2$$

discovered by Albert Einstein in 1905.

'Subscripts' in math mode are written as  $a_b$  and 'superscripts' as  $a^b$ . These can be combined and nested to write expressions such as -

$$T^{i_1 i_2 \dots i_p}_{j_1 j_2 \dots j_q} = T(x^{i_1}, \dots, x^{i_p}, e_{j_1}, \dots, e_{j_q})$$

We write integrals using  $\int$  and fractions using  $\frac{a}{b}$ . Limits are placed on integrals using superscripts and subscripts:

$$\int_0^1 \frac{1}{e^x} = \frac{e-1}{e}$$

Lower case Greek letters are written as  $\omega$ ,  $\delta$ , etc. While upper case Greek letters are written as  $\Omega$ ,  $\Delta$ . Mathematical Operators are prefixed with a backslash as  $\sin(\beta)$ ,  $\cos(\alpha)$ ,  $\log(x)$ , etc.

The possibilities with math in LATEX are endless and it is impossible to list them all here. Be sure to check out our other articles.

We will now look at how to write abstracts, as well as how to format a Latex document into different chapters.

#### Abstract

In Scientific documents, it is a common practice to include a brief overview of the main subject of the paper. In Latex, there is the abstract environment for this. The abstract environment will put the text in a special format at the top of your document. Now that we have written our abstract, we can begin writing our first paragraph.

This line will start a second paragraph. If you need to start a second paragraph, you must hit the enter key twice. Notice that Latex automatically indents paragraphs.

Hello, This is

a new line demonstration.

Hope you liked it. Bye!

Commands to organize a document vary depending on the document type, the simplest form of organization is sectioning, available in all formats.

### 1 Introduction

This is the first section.

In my first section, I would like to tell you that today I will be finishing with my Latex tutorial finally and starting to work on many documents and most importantly my CV in LATEX.

### 2 Second Section

This is the second section, I would like to tell you that today I will be finishing with my Latex tutorial finally and starting to work on many documents and most importantly my CV in LATEX.

#### 2.1 First Subsection

In my first Subsection, I would like to tell you that today I will be finishing with my Latex tutorial finally and starting to work on many documents and most importantly my CV in LATEX.

#### 2.1.1 First Sub-subsection

In my first Sub-subsection, I would like to tell you that today I will be finishing with my Latex tutorial finally and starting to work on many documents and most importantly my CV in LATEX.

### Unnumbered Section

In my Unnumbered section, I would like to tell you that today I will be finishing with my Latex tutorial finally and starting to work on many documents and most importantly my CV in LATEX.

CREATING TABLES -

cell1	cell2	cell3
cell4	cell5	cell6
cell7	cell8	cell9

A Second Example - with Captions, Labels & References. Table 1 is an example of referenced LATEX elements.

col1	col2	col3	col4
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Table 1: Table to test Captions, Labels and Referencing.

The LATEX tutorial is now complete. It is time to get your hands dirty. From now on, whenever you get stuck or need some additional guidance while working on LATEX, you can either revisit this document or visit the specific section of the overleaf documentation that addresses your problem. Have Fun!

The End.