

# Learning L<sup>A</sup>T<sub>E</sub>X

Anzong Zheng

February 14, 2015



# Contents

<b>1</b>	<b>Font sizes, families, and styles</b>	<b>5</b>
1.1	Introduction . . . . .	5
1.2	Font sizes . . . . .	5
1.3	Font families . . . . .	5
1.4	Font styles . . . . .	6
1.5	Reference sizes . . . . .	6



# Chapter 1

## Font sizes, families, and styles

L<sup>A</sup>T<sub>E</sub>X normally choose the appropriate font and font size based on the logical structure of the document (e.g. sections). In some cases, you may want to set fonts and sizes by hand.

### 1.1 Introduction

The syntax to set a font size or font style is easy:

```
1 This is a simple example, {\tiny this will show different font sizes} and also \leftrightarrow  
   \textsc{different font styles}.
```

This is a simple example, this will show different font sizes and also DIFFERENT FONT STYLES.

### 1.2 Font sizes

Font sizes are identified by special names, the actual size is not absolute but relative to the font size declared in the `\documentclass` statement.

```
1 In this example the {\huge huge font size} is set and the {\footnotesize Foot \leftrightarrow  
   note size also}. There's a fairly large set of font sizes.
```

In this example the **huge font size** is set and the Foot note size also. There's a fairly large set of font sizes.

In the example, `{\huge huge font size}` declares that the next text inside the braces must be formatted in a *huge* font size.

### 1.3 Font families

By default, in standard L<sup>A</sup>T<sub>E</sub>X classes the serif typeface (a.k.a. roman) font is used. The other font typefaces (sans serif and typewriter, a.k.a. monospace) can be used by entering some specific commands.

```
1 In this example command and switches are used.  
2 \texttt{A command is used to change the tyle of a setence}  
3  
4 \sffamily  
5 A switch changes the style from this point to the end of the document unless \leftrightarrow  
   other switch is used
```

In this example command and switches are used. A command is used to change the tyle of a setence  
A switch changes the style from this point to the end of the document unless other switch is used  
You can set up the use of sans font as a default in L<sup>A</sup>T<sub>E</sub>X document by using command:

```
1 \renewcommand{\familydefault}{\sfdefault}
```

Similarly, for using roman font as a default:

```
\renewcommand{\familydefault}{\rmdefault}
```

## 1.4 Font styles

The most common font styles in L<sup>A</sup>T<sub>E</sub>X are bold, italics and underlined, but there are a few more.

```
Part of this text is written \textsl{in different font style} to highlight it.
```

Part of this text is written *in different font style* to highlight it.

In the example at the introduction the *small caps* style was used. In this case the `\textsl` command sets the *slanted* style which makes the text look a bit like *italics* but not quite.

If you want to go back to "normal" font style (default for the L<sup>A</sup>T<sub>E</sub>X class you are using), this can be done by using the `\textnormal{...}` command or the `\normalfont` switch command.

## 1.5 Reference sizes

Table 1.1: Font sizes

Command	Output
<code>\tiny</code>	Lorem ipsum
<code>\scriptsize</code>	Lorem ipsum
<code>\footnotesize</code>	Lorem ipsum
<code>\small</code>	Lorem ipsum
<code>\normalsize</code>	Lorem ipsum
<code>\large</code>	Lorem ipsum
<code>\Large</code>	Lorem ipsum
<code>\LARGE</code>	Lorem ipsum
<code>\huge</code>	Lorem ipsum
<code>\Huge</code>	Lorem ipsum

Table 1.2: Default font families

typeface=family	command	switch command	output
serif(roman)	<code>\textrm{Sample Text 0123}</code>	<code>\rmfamily</code>	Sample Text 0123
sans serif	<code>\textsf{Sample Text 0123}</code>	<code>\textsf</code>	Sample Text 0123
typewriter(monospace)	<code>\texttt{Sample Text 0123}</code>	<code>\texttt</code>	Sample Text 0123

Table 1.3: Font styles

style	command	switch command	output
medium	<code>\textmd{Sample Text 0123}</code>	<code>\mdseries</code>	Sample Text 0123
bold	<code>\textbf{Sample Text 0123}</code>	<code>\bfseries</code>	<b>Sample Text 0123</b>
upright	<code>\textup{Sample Text 0123}</code>	<code>\upshape</code>	Sample Text 0123
italic	<code>\textit{Sample Text 0123}</code>	<code>\itshape</code>	<i>Sample Text 0123</i>
slanted	<code>\textsl{Sample Text 0123}</code>	<code>\slshape</code>	<i>Sample Text 0123</i>
small caps	<code>\textsc{Sample Text 0123}</code>	<code>\scshape</code>	SAMPLE TEXT 0123