

# Latex Reference And Example

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### **Abstract**

A handful of notes and examples on the basics of Latex.

# 1 About other latex files by John

AcademicJournalExample.tex represents the master latex document from which examples should be taken.

## 2 Setup Latex Environment

### 2.1 Basic install

Latex version:  $\LaTeX 2_{\epsilon}$

Windows Dowload and Install: MiKTeX <http://www.tug.org/protext/>, a wizard and package including MiKTeX and TeXStudio. MiKTeX wraps a  $\LaTeX 2_{\epsilon}$

Citations, references, bibliography:

- Latex packages: 'biblatex', 'biblatex-chicago'.

IDE: TexStudio. For getting up and running quickly start with . It helps compile and preview everything very well out of the box. It comes with MiKTeX.

### 2.2 Make miktex aware of custom packages

Miktex Console (4.2) > Settings > Directories > [+]. Select the TEXMF root directory. E.g. C:\Users\John\Documents\Sda\Code\WritingReadingTech\Markup\Latex\Libraries\texmf

More information [Stackexchange > Tex > Where do I place my own .sty or .cls files, to make them available to all my .tex files?](#), Answer by John Bentley

For futher configuration instructions see C:\Users\John\Documents\CustomData\AppDataUserSaved\Brainforest\DevandComputer\Setup\Setup-Master-Windows.pdb

## 3 Tex source files

$\LaTeX$  operates on plain text files formatted in  $\TeX$ . Create a plain text file and give it a \*.tex extension.

## 4 Minimal $\TeX$ templates

### 4.1 Minimal - almost - absolute

```
\documentclass{article}
\begin{document}
Lorem.
\end{document}
```

### 4.2 Minimal document

Shows more of the basic structure for a basic document:

```
\documentclass[12pt,a4paper]{article}

\title{My Document Title}
\author{John Bentley}

% This is a comment

% Between \documentclass and \begin{document} is the preamble.

% Package declarations go in the preamble, for example.
\usepackage[showseconds=true,showzone=true]{datetime2}

\begin{document}

\maketitle

\section{Section Heading Lorem}
Lorem amet aute culpa.

\section{Section Heading Sunt}
Sunt nisi sit consequat.

\end{document}
```

## 5 Latex engines

### 5.1 Choose a latex engine

In short: Invoke the XeTeX engine through the `xelatex` command.

Engines:

- TeX. The original
- eTeX. Late 90s. Obsolete. Functions incorporated by later engines.
- pdfTeX. Output: pdf by default. Features: Incorporates and extends eTeX.
- XeTeX. 2004 Input: native UTF-8 Unicode. Fonts: OpenType and TrueType. Output: pdf by default. Features: Incorporates and extends eTeX; XeTeX uses system-specific libraries to work (speed advantage?)
- LuaTeX. 2012 active development. Input: native UTF-8 Unicode. Fonts: OpenType and TrueType. Output: pdf by default. Features: supports Lua scripting.

At the moment, I'd use XeTeX for UTF-8 and font support, unless I was after particular effects that only LuaTeX does well (Arabic typography is a particular challenge). The choice between XeTeX and LuaTeX is 'tight': both have advantages depending on your exact requirements.

([Joeseph Wright, 2015-08-25 14:05, Answer to "Differences between LuaTeX, ConTeXt and XeTeX"](#))

Table 1: Command and engine relationship

Command	Engine	Notes
latex	pdfTeX	Main output .dvi
pdflatex	pdfTeX	Main output .pdf
lualatex	LuaTeX	Main output. .pdf
xelatex	XeTeX	Main output. .pdf

See:

- [LaTeX2e unofficial reference manual \(December 2015\), 2.3 TeX engines](#)

## 5.2 Xetex usage

See `PackageExamples\XetexUnicodeFontLanguages.tex`

## 6 Xetex Fonts Languages Unicode

See `PackageExamples\XetexUnicodeFontLanguages.tex` (including `babel` and `polyglossia` package use).

## 7 Basic packages

Packages are declared in the preamble, before the `\begin{document}` statement.

- Page Layout: the default, `geometry`, or `a4wide`.

```

%\usepackage{a4wide}
\usepackage[hmargin=50pt,vmargin={30pt,40pt}
,includeheadfoot]{geometry}
```

- Custom margin text: `fancyhdr`.

```

% Margin text
\usepackage{fancyhdr}
\pagestyle{fancy}

% clears the header and footer
\fancyhf{}

% Keeps header and footer same size text when adjusting
% margins
\fancyhfoffset{0pt}

\makeatletter
\let\runauthor\@author
\let\runtitle\@title
\makeatother
```

```
\lhead{\it\runtitle}
\rhead{\it\runauthor}

\lfoot{\it Last revised: \lastrevised}
\rfoot{\it\thepage}
```

- ISO compliant datetimes: `datetime2`

```
\usepackage[showseconds=true,showzone=true]{datetime2}
```

- Display embedded images: `graphicx`.

```
\usepackage{graphicx}
...
\begin{figure}[!htbp]
  \centering
  \includegraphics[width=0.7\linewidth]{../AsciiDoc/cat-roll}
  \caption{A great cat roll}
  \label{fig:cat-roll}
\end{figure}
```

## 8 Basic syntax

### 8.1 Reference packages

Normally:

```
\usepackage{somepackage}
```

In another directory (`../` = parent directory):

```
\usepackage{../../Libraries/verbsar}
```

### 8.2 Commands

See [https://en.wikibooks.org/wiki/LaTeX/Basics#LaTeX\\_commands](https://en.wikibooks.org/wiki/LaTeX/Basics#LaTeX_commands).

Commands either:

- Brace the text they operate on. E.g. `\emph{emphasized text}`; or
- (Mostly) have a "switch" equivalent which operates on the text until the end of the current scope, or countermanded by another switch. E.g. `Lorem {\em emphasized text}, normal text.`

Command braced

*Lorem ipsum dolor sit amet consectetur*

`Lorem \emph{ipsum dolor} sit amet consectetur`

Command - switched and scope limited

Lorem *ipsum dolor* sit amet consectetur.

Lorem `{\em ipsum dolor}` sit amet consectetur.

Command - switched and scope limited by command pairs

Lorem *ipsum dolor* sit amet consectetur.

Lorem `\bgroup\em ipsum dolor\egroup{}` sit amet consectetur.

Command - switched and countermanded

Lorem *ipsum dolor* sit amet consectetur.

Lorem `\em ipsum dolor \normalfont` sit amet consectetur.

Command syntax:

```
\commandname [option1, option2, ...] {argument1} {argument2} ...
```

## 8.3 Spaces

LaTeX2e unofficial reference manual (April 2021):

```
\enspace
\quad
\qquad
```

Insert a horizontal space of 1/2 em, 1 em, or 2 em.

The em is a length defined by a font designer, often thought of as being the width of a capital M.

So `\quad` is 1 em!

## 8.4 Avoid spaces in commands

See `C:\Users\John\Documents\Sda\Code\WritingReadingTech\Markup\Latex\Examples\DesignSpikes\LengthAndSpacing.tex`.

An end of line counts as a space, except for the opening bracket. To eliminate the end of line space, use a comment.

```
% To eliminate the end of line space, use a comment.
% The following comment characters are necessary for reducing space.
\newcommand{\gammapart}[1]{
  \mbox{#1}%
}
\newcommand{\deltapart}[1]{%
  \mbox{#1}
}

\gammapart{lorem}\deltapart{ipsum dolor sit amet}
```

Therefore, as a general matter of style, for command that output text, always put end of line comment character after the first bracket and every subsequent command.

```
\newcommand{\gammapart}[1]{%
  \mbox{#1}%
}
\newcommand{\deltapart}[1]{%
  \mbox{#1}%
}

\gammapart{lorem}\deltapart{ipsum dolor sit amet}
```

## 8.5 Environments

See [https://en.wikibooks.org/wiki/LaTeX/Basics#LaTeX\\_environments](https://en.wikibooks.org/wiki/LaTeX/Basics#LaTeX_environments)

### Usage of a native environment

Lorem ipsum dolor sit amet consectetur neque vitae eget quam Curabitur. Nec dictumst dictum semper orci Morbi tortor Phasellus Vestibulum sed accumsan.

```
\begin{quotation}
  Lorem ipsum dolor sit amet consectetur neque vitae eget
  quam Curabitur. Nec dictumst dictum semper orci Morbi
  tortor Phasellus Vestibulum sed accumsan.
\end{quotation}
```

## 8.6 Scope limitation

See [https://en.wikibooks.org/wiki/LaTeX/Basics#LaTeX\\_groups](https://en.wikibooks.org/wiki/LaTeX/Basics#LaTeX_groups).

Scope can be limited either by using braces {, } or by using \bgroup and \egroup command pairs. E.g.:

Command - switched and scope limited by command pairs

Lorem *ipsum dolor* sit amet consectetur.

```

Lorem \bgroup\em ipsum dolor\egroup{} sit amet consectetur.
    
```

## 8.7 Define commands

See [LaTeX2e unofficial reference manual, 12.1 newcommand and renewcommand](#).

Syntax (\* optional: means forbid multiple paragraphs):

```

\newcommand*{cmd} [nargs] [optargdefault] {defn}
\renewcommand*{cmd} [nargs] [optargdefault] {defn}
    
```

Custom command

2 and k.

```

% Create
\newcommand{\mycommand}[2]{#1 and #2}
% Invoke
\mycommand{2}{k}.
    
```

You can use `\newcommand` in document body or preamble.

## 8.8 Define environments

See [LaTeX2e unofficial reference manual \(December 2015\), 12.6 newenvironment and renewenvironment](#).

Syntax:

```

\newenvironment*{env} [nargs] [optargdefault] {begdefn} {enddefn}
\renewenvironment*{env} [nargs] [optargdefault] {begdefn} {enddefn}
    
```

The star is optional. Generally omit it.

For effecting multiple lines of text, including multiple paragraphs, it is necessary to use an environment rather than a command. Wrap text in a `\begin{environmentname}` and `\end{environmentname}` command pair. E.g.:

- Basic 1:

```

\newenvironment{jlbexample}{\begin{mdframed}}{\end{mdframed}}

\begin{jlbexample}
  cool
\end{jlbexample}
    
```



- Basic 2:

```
\newenvironment{myenvironment}{\noindent\em}{}
\begin{myenvironment}
Lorem ipsum dolor sit ...
\end{myenvironment}
```

*Lorem ipsum dolor sit amet consectetur eget et et convallis non. Leo Sed ornare et nibh egestas ligula et elit porta et.*

item Parameter expanded at start:

```
\newenvironment{myquoteauthorstart}[1][Shakespeare]{%
\begin{quotation}
\noindent\textit{#1}:
}{%
\end{quotation}
}

\begin{myquoteauthorstart}[The Dude]
Lorem ipsum dolor sit amet ...
\end{myquoteauthorstart}
```

*The Dude:* Lorem ipsum dolor sit amet consectetur eget et et convallis non. Leo Sed ornare et nibh egestas ligula et elit porta et.

- Parameter expanded at end (with hack)

```
\newsavebox{\quoteauthor}
\newenvironment{myquoteauthorend}[1][Shakespeare]{%
\savebox\quoteauthor{#1}%
\begin{quotation}
}{%
\hfill---\usebox{\quoteauthor}
\end{quotation}
}

\begin{myquoteauthorend}[The Dude]
Lorem ipsum dolor sit amet ...
\end{myquoteauthorend}
```

Lorem ipsum dolor sit amet consectetur eget et et convallis non. Leo Sed ornare et nibh egestas ligula et elit porta et. —The Dude

## 9 Command programming/macros

## 10 Paragraph layout

Remove indents and insert line between paragraphs.

See `\Latex\Examples\DesignSpikes\ParagraphLayout.tex`.

## 11 Margins and Page Numbering

See `\Latex\Examples\DesignSpikes\MarginsAndPageNumbering.tex`.

Margins geometry:

```
\usepackage[hmargin=15mm, tmargin=11mm, includeheadfoot]{geometry}
\geometry{bmargin=5mm} % Referencing options once package declared

% For debugging see Log > log File. No need for \geometry{verbose=true}

\setlength{\headheight}{15pt} % Prevent warnings
\setlength{\headsep}{1em}
\setlength{\footskip}{1.75em}
```

Margin text:

```
\usepackage{lastpage} % Provide \pageref{LastPage}
\RequirePackage{fancyhdr}
\pagestyle{fancy}

% clears the header and footer
\fancyhf{}

% Keeps header and footer same size text when adjusting margins
\fancyhfoffset{0pt}

\makeatletter
\let\runauthor\@author
\let\runtitle\@title
\let\rundate\@date
\makeatother

\lhead{\it\runtitle}
\rhead{\it\runauthor}

\lfoot{\it\rundate}
```

Page Numbering:

```
% Requires fancyhdr and lastpage packages

% Using LastPage is discouraged.
% LastPage is processing intensive.
% The compiler has to do two passes to determine last page, and then
% Reinsert it.

% If not using hyperref
\rfoot{\it\thepage\ of \pageref{LastPage}}

% Suppress making LastPage a link, if using hyperref. Requires hyperref.
\rfoot{\it\thepage\ of \pageref*{LastPage}}
```

```
% Page only
\rfoot{\it\thepage}
```

Suppress any margin text on first page:

```
\begin{document}

\maketitle
% Suppress any margin text on first page
\thispagestyle{empty}
```

## 12 Datetime

See `\Latex\Examples\DesignSpikes\Datetime.tex`.

```
\usepackage{datetime2}

% Set the document date to the current datetime
% for use in margins, title page, etc.
% \DTMnow comes from the datetime2 package
\date{\DTMnow}

\begin{document}

\today

\DTMcurrenttime

\DTMnow
```

## 13 Comments

### 13.1 Comment out block

```
% Change to \iftrue to effect enclosed commands.
\iffalse
  Lorem ipsum dolor sit amet consectetur
  In felis nunc elit tincidunt.
  Rutrum Aenean netus volutpat.
\fi
```

## 13.2 Comment character at the end of line

Without end of line comment character - rogue spaces

```

Lorem ( the fonz )

\newcommand{\cool}[1]{
  \emph{#1}
}

Lorem (\cool{the fonz})

```

With end of line comment character - no rogue spaces (recommended)

```

Lorem (the fonz)

\newcommand{\cool}[1]{%
  \emph{#1}%
}

Lorem (\cool{the fonz})

```

## 14 Bibliographies and Citations

### 14.1 Overview

Use biblatex.

- Package: Use biblatex, not native bibtex, nor natbib.
- Backend Driver: biblatex works best with biber. This is the default backend when biblatex is installed. You shouldn't have to do anything to set it. However, in **TeXStudio: Options > Configure TeXStudio > Commands > Biber** = [Verify to set to `biber.exe %` or `biber.exe -output-directory=output -input-directory=output %`].
- Reference Management Software: [Zotero](#) works very well; with the add-on [zotero-better-bibtex](#).
- Bib Files: Create bib files in biblatex format, not bibtex format. Zotero can export in biblatex format (in addition to bibtex format). Use [zotero-better-bibtex](#) in Zotero for exporting to biblatex.
- For entries with a modern and original date use Zotero's Date and Zotero's Extra field with `bibtex[origdate=...]` respectively.
- For the biblatex style: we use (\*todo)?
- In biblatex use the option `alldates=ynd`.

Example \*.tex source document with biblatex setup, MyRefsBibLatex.bib as a separate file.

## 14.2 Terminology

John Bentley citation terminology see `Biblatex-CustomStyle-Tester.tex`, “Terminology”:

- In-biblatex-database.
- In-text-specially-marked. Specially marked generally with parantheses () or a footnote superscript numeral.
- In-text-flow.
- In-document-list. A citation in the list at the end of the document (as for “References”) or at the bottom of the page.

## 14.3 Configuration specification

See `C:\Users\John\Documents\CustomData\AppDataUserSaved\Brainforest\DevandComputer\Setup\Setup-Master-Windows.pdb` for configuration of Zotero and `zotero-better-bibtex`.

## 14.4 Date format

## 14.5 Specification

- For the biblatex style: Use `biblatex-chicago`’s `authordate` rather than a native biblatex style (like `authoryear`).
- In biblatex use the option `alldates=ymd`. See (\*todo Should be one Mwe to demo a spec) `Biblatex-Mwe.tex`, and `BiblatexSourceMapping-Mwe.tex`. So we might end up with something like (in chicago):

Barker, Anne. **(2016-06-06)**. “Swiss voters say no to guaranteed free money”. *ABC News*.  
[Bold added]

## 14.6 Language support

The specification above entails that dates are formatted language agnostically, since we use `alldates=ymd`. If, however, we where to use colloquial date formatting, by using `alldates=long`, we should use `babel` rather than `polyglossia` to ensure our bibliographies and citations pickup the right language variant, and format according to that language. See `BiblatexXetexPolyglossiaDates-Mwe.tex` and <http://tex.stackexchange.com> > [How do we get Polyglossia language variants to work with Biblatex bibliographies?](http://tex.stackexchange.com)

So something like ...

```
\usepackage[british]{babel}

%\usepackage{polyglossia}
%\setdefaultlanguage[variant=british]{english}

\usepackage[%
  style=authoryear,%
  alldates=long,%
  %alldates=ynd,
  language=auto,%
  autolang=langname,%
  backend=biber
]{biblatex}
```

... produces ...

Barker, Anne. **(6th June 2016)**. “Swiss voters say no to guaranteed free money”. *ABC News*.  
 [Bold added]

## 14.7 Modern and original dates and the free form fields - note, addendum, annotation

How do we handle modern and original dates? Which biblatex field to use for free form information: note, addendum, or annotation?

### 14.7.1 Specification

Style specification:

- If you want to mention, free text style, the modern date at the end of the entry then use the phrase “Modern publication date XXXX”.

Zotero and Zotero-better-biblatex specification:

- For entries with a modern and original date use Zotero’s Date and Zotero’s Extra field with `bibtex[origdate=...]` respectively. Don’t put “Modern publication date ...” in the Zotero’s Extra to biblatex’s addendum field, as we use `DeclareSourceMap` in our tex document to handle this. So, in Zotero, do ...

```
% Zotero extra field
Date: 1975
Extra: bibtex[origdate=1751]

% Resulting biblatex format (using zotero-better-bibtex)
{
  ...
  date={1975},
```

```
origdate = {1751},
...
}
```

- For free form publication information use Zotero’s Extra field to biblatex’s addendum field. Our tex document `DeclareSourceMap` is built so that any “Modern publication date ...” information is appended to addendum rather than overwrites it.

```
% Zotero extra field
Extra: bibtex[addendum=This book is awesome.]

% Resulting biblatex format (using zotero-better-bibtex)
{
...
addendum={This book is awesome.}
...
}
```

- Don’t use Zotero’s Notes field. Zotero’s Notes field maps to biblatex’s annotation field (and only `biblatex-chicago` recognizes biblatex’s annotation). If you must use it, regard Zotero’s Notes field as containing information that doesn’t get printed out in a bibliography.

- Ensure your citation keys in Zotero use the original year, not the modern year:

Use the `zotero-better-bibtex`’s [Set your own fixed citation key](#)’s feature.

See also `zotero-better-bibtex` [\[Feature request\] Using origyear in a custom citation key](#). 591.

For example, in Zotero my Hume entry currently has a citation key `hume_1975_enquiry` and I want to end up with `hume_1751_enquiry`. To do this:

- In Zotero right click on the entry > ”Generate BibTex Key”. ”bibtex: hume\_1975\_enquiry” will be appended to the Extra field (and so, excellently, does not interfere with existing values in the Extra field).
- Manually edit ”bibtex: hume\_1975\_enquiry” to be the desired key, ”bibtex: hume\_1751\_enquiry”.
- Tab out of the Extra field to save.
- Click on some other entry. Click again on the Hume entry. This will refresh the Citation Key which now should be taking its value from the Extra Field ”bibtex: hume\_1751\_enquiry”. That is, the Citation Key should now be ”hume\_1751\_enquiry”.

Tex documents specification:

- If we are using biblatex’s native style `authoryear` then we use Biblatex data source mapping (using `DeclareSourceMap`) to append original or modern publication dates to biblatex’s addendum field. See `BiblatexSourceMapping-Mwe.tex` for the code.
- If we are using `biblatex-chicago` (with a style like `authordate`) then we don’t need to apply any data source mapping (using `DeclareSourceMap`). We just take the biblatex data resulting from the above processes (Under “Zotero and Zotero-better-biblatex specification”).

### 14.7.2 Information

Style, biblatex, and biblatex-chicago information:

- See also `StyleGuides-OnBibliographyFormat-LaterVersionsOfAWork.md`.
- Biblatex fields `note`, `addendum` are common to the styles: `biblatex native` `authoryear` and `biblatex-chicago`. The `biblatex` field annotation is not recognized by `authoryear`, but is by `biblatex-chicago`.
- Biblatex field order in bibliography output: `note`, `addendum`, then `annotation` (if available).

Native `authoryear` style:

Chalmers, David J. (1995). "Facing up to the problem of consciousness". In: *Journal of Consciousness Studies* 2.3. **Note**, pp. 200-19. url: <http://consc.net/papers/facing.html>.  
**Addendum.**

Chicago style:

Chalmers, David J. 1995. "Facing up to the problem of consciousness." **Note**, *Journal of Consciousness Studies* 2 (3): 200-19. **Addendum**, <http://consc.net/papers/facing.html>. (Cited on page 1).  
**Annotation.**

- Zotero's `Notes` field maps, by default, to `biblatex`'s `annotation` field. This is true for both Zotero export formats `zotero-better-bibtex` and `biblatex`.
- By itself the `Zotero extra` field will map to `biblatex`'s `note`

```
Extra: Fonzy

% Results
{
...
note = {Fonzy},
...
}
```

Zotero information:

- For custom `biblatex` fields, use `zotero-better-bibtex` and the `Zotero extra` field in `zotero-better-bibtex` format.

```
Extra: bibtex[origdate=1751]
```

- Stuffing the `Zotero extra` field with `biblatex` custom fields and the `biblatex addendum` field, works OK using `zotero-better-bibtex`.



```
% Zotero extra field
% Don't add a full stop to addendum text (unless it is a multi sentence
  paragraph).
bibtex[origdate=1751;addendum=This book is awesome]

% Resulting biblatex format (using zotero-better-bibtex)
{
...
origdate = {1751},
...
addendum = {This book is awesome.},
...
}
```

- Although Zotero doesn't support a @reference type (the nearest equivalent would be a @book), you can use the Zotero add-on better-bib(la)tex to export an entry with a @reference type. In the extra field put: biblatex[referencetype=reference].

## 14.8 Examples and listings

```
\documentclass[12pt,b5paper,final]{article}
...
\usepackage[citestyle=verbose-trad2,bibstyle=authoryear,
  sorting=nyt,backref=true,alldates=iso8601]{biblatex}
\addbibresource{MyRefsBibLatex.bib}
\setlength{\bibitemsep}{1em plus 0.2em minus 0.2em}
...
\begin{document}
...
\clearpage
\printbibliography
\end{document}
```

### Citation

Lorem (Hume 1975).

Lorem \autocite{hume\_1975\_enquiry}.

```
\documentclass[12pt,b5paper,final]{article}
...
\usepackage[citestyle=verbose-trad2,bibstyle=authoryear,
  sorting=nyt,backref=true,alldates=iso8601]{biblatex}
\addbibresource{MyRefsBibLatexInSameSourceFile.bib}
\setlength{\bibitemsep}{1em plus 0.2em minus 0.2em}
...
\begin{document}
```

```
...
\clearpage
\printbibliography
\end{document}

\begin{filecontents}{MyRefsBibLatexInSameSourceFile.bib}
  @article{blecker_killing_2008,
    title = {Killing Them Softly: Mediations on a Painful
    Punishment of Death},
    volume = {35},
    ...
  \end{filecontents}
```

## 15 Quotes

- See `Quotes-csquotes.tex`, which details native and `csquotes` package use (which is good for handling foreign quotes).
- See `XetexUnicodeFontLanguage.tex`, “Markup and quote foreign language inline”.

### 15.1 Native

Inline: Lorem ipsum “dolor” sit amet ‘consectetuer’ consectetur.

Blockquotes: No indents. Line separates paragraphs. Use `quote` (Recommended):

Id odio adipiscing felis urna at Pellentesque nascetur mi neque molestie. Pharetra dui urna Pellentesque adipiscing egestas eget orci porttitor Nulla sit. Quisque mus feugiat nunc quis Curabitur nascetur cursus quis vitae augue.

Pede pede ac scelerisque interdum lacinia ac wisi nibh tempor vestibulum. Nibh pede Nam quis justo vestibulum urna sem gravida est neque. Cursus tincidunt id odio Curabitur risus amet. (Blecker 2008)

## 16 Cross References

See `CrossReferences.tex`.

## 17 Color

With xcolor package.

### 17.1 Color use direct

Color as number

Lorem ipsum.  
 Lorem ipsum.  
 Lorem ipsum.

```

\textcolor[rgb]{0.4,0,0.6}{Lorem ipsum.}\\
\textcolor[RGB]{102,0,153}{Lorem ipsum.}\\
\textcolor[HTML]{660099}{Lorem ipsum.}
  
```

Color using user defined names

Lorem ipsum.  
 Lorem ipsum. From dvipsnames  
 driver of xcolor

```

\textcolor{HtmlColor}{Lorem ipsum.}\\
\textcolor{LimeGreen}{Lorem ipsum.} From dvipsnames\\
driver of xcolor
  
```

### 17.2 Color and hyperref package

Url color (external link)

Lorem [Google](#).

```

Lorem \href{http://www.google.com}{Google}.
  
```

Link color (internal link)

Lorem ??

```

Lorem \nameref{Example blocks}
  
```

## Cite color

Lorem (Pinker 2010).

```
Lorem \autocite{pinker_2010_great}.
```

## 18 Urls and paths - hyperref url

See `PackageExamples\UrlsAndPaths-HyperrefUrl.tex`

### 18.1 url package

`\url` comes from the `url` package, but this package is included in `hyperref` and `xcolor`.

## Url only

Lorem <http://tex.stackexchange.com/questions/125279/path-command-problem-in-a-text-document>

```
Lorem \url{http://tex.stackexchange.com/questions
/125279/path-command-problem-in-a-text-document}
```

## Local Path

Lorem `C:\Users\John\Documents\CustomData\AppDataUserSaved\Brainforest\DevandComputer\Setup\Setup-Master-Windows.pdb`

```
Lorem \path{C:\Users\John\Documents\CustomData\
AppDataUserSaved\Brainforest\Dev and Computer
\Setup\Setup - Master - Windows.pdb}
```

### 18.2 hyperref package

`\href` is from the `hyperref` package. The `hyperref` package includes the `url` package.

## Url with friendly name

Lorem [TUG protex](http://www.tug.org/protex/)

```
Lorem \href{http://www.tug.org/protex/}{TUG protex}
```

## 19 Verbatim

### 19.1 Plain - native

```
fc-list :outline -f "%{family}\n" | Sort-Object -Unique | Select-String
```

### 19.2 Plain - listings lstautogobble wordwrap

See `PackageExamples\VerbatimPlain-ListingsLstAutogobble.tex`

```
fc-list :outline -f "%{family}\n" | Sort-Object -Unique | Select-String
```

Or use `MyCommand`.

### 19.3 Source and result - tcolorbox

See `PackageExamples\VerbatimSourceAndResult-Tcolorbox.tex`

One gobble

Lorem

Lorem

Two gobble

Lorem

Lorem

## 20 Frames

### 20.1 Pretty - mdframe

See `PackageExamples\FramesPretty-MDFramed.tex`

Cool Frame...

## References

- Hume, David (1975). “An Enquiry Concerning the Principles of Morals”. In: *Enquiries Concerning Human Understanding and Concerning the Principles of Morals*. Ed. by L. A. Selby-Bigge and P. H. Nidditch. 3rd ed. New York: Oxford University Press, 1975-06-12. ISBN: 978-0-19-824536-0.
- Blecker, Robert (2008). “Killing Them Softly: Mediations on a Painful Punishment of Death”. In: *Fordham Urban Law Journal* 35.4 (2008-07-03), p. 969. URL: <http://208.67.208.161/~rblecker/wp-content/uploads/2012/02/Killing-Them-Softly.pdf> (visited on 2016-05-01).
- Pinker, Steven (2010). “The Great Debate - Can Science Tell US Right From Wrong?” 2010-11-06. URL: <http://thesciencenetwork.org/programs/the-great-debate/steven-pinker-3> (visited on 2016-05-01).