

# Lecture 2 - Typesetting

$\text{\LaTeX}$  for Math and Science  
Christian Blanco and Brandon Eltiste

Spring 2011 Week 2

# Outline

1 Introduction to  $\text{\LaTeX}$

2 Typesetting

3 Exercise / HW

# Class Logistics

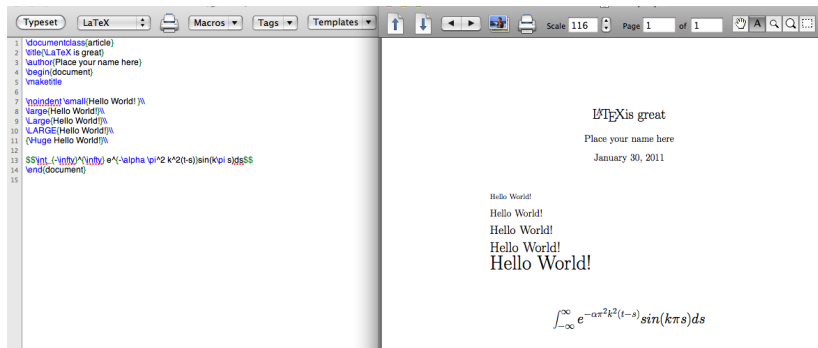
## Agenda for the day

- 1 Lecture 45 mins
- 2 Release Computer access
- 3 During lab we will give out CCN/CEC
- 4 HW will be posted tonight
  - We will divide the class and you will have one grader for the semester.

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

L<sup>A</sup>T<sub>E</sub>X versus Microsoft Word<sup>©</sup> or other programs

L<sup>A</sup>T<sub>E</sub>X is considered WYSIWYW (what you see is what you want)



I cropped this using L<sup>A</sup>T<sub>E</sub>X !

# The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

# The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X**
- 3 Edit - Revise
- 4 Repeat step 1

Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

# The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise**
- 4 Repeat step 1

Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

# The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort



## The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

## Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

## The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

## Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

## The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

## Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

## The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

## Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

## The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

## Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.)  
without effort

## The L<sup>A</sup>T<sub>E</sub>X Life Cycle

- 1 Type document in a text editor
- 2 Compile or Typeset using L<sup>A</sup>T<sub>E</sub>X
- 3 Edit - Revise
- 4 Repeat step 1

## Functionality (a few among many others)

- 1 Automatic Numbering
- 2 Auto Reference (ie outlines, table of contents, figures)
- 3 Easy Bibliography
- 4 Macros
- 5 Ability to change anything (formatting pages, margins, etc.) without effort

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`



# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\Sigma$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`



# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ Commands: \

- `\documentclass`
- `\begin`
- `\sum`  $\sum$

## ■ Arguments: { }

- `\documentclass{article}`
- `\begin{center}`
- `\sum_{n=1}^{\infty}`  $\sum_{n=1}^{\infty}$

## ■ Other Examples of \Command{Argument}

- `\author{Your name here}`
- `\title{Your title here}`
- `\begin{document}`
- `\maketitle`
- `\end{document}`

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \ \$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands



# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for ã accents
- \textbackslash vs \ is used for commands

# Typesetting

## ■ 10 Characters that are reserved for L<sup>A</sup>T<sub>E</sub>X

- # \$ % ^ \_ { } ~ \
- \# vs # is used for macros
- \\$ vs \$ is used for inline math equations
- \% vs % is used for comments
- \textasciicircum{} vs ^ is used for superscript
- \\_ vs \_ is used for subscript
- \{ \} vs { } are used for arguments
- \~{} vs ~ is used for õ accents
- \textbackslash vs \ is used for commands

## ■ Environments

- `\begin{environment} \end{environment}`
- `\begin{itemize}`
  - `\item Banana`
  - `\item Apple`
  - `\item Banapple``\end{itemize}`
- `\textbf{ Bold Text }`  
or `{\bf Enter text here }`
- `\begin{center} \end{center}`
- You can even do nested environments

```
\begin{table}
\begin{tabular}
\end{tabular}
\end{table}
```

## ■ Environments

■ `\begin{environment} \end{environment}`

■ `\begin{itemize}`

`\item Banana`

`\item Apple`

`\item Banapple`

`\end{itemize}`

■ `\textbf{ Bold Text }`

or `{\bf Enter text here }`

■ `\begin{center} \end{center}`

■ You can even do nested environments

`\begin{table}`

`\begin{tabular}`

`\end{tabular}`

`\end{table}`



## ■ Environments

■ `\begin{environment} \end{environment}`

■ `\begin{itemize}`

`\item Banana`

`\item Apple`

`\item Banapple`

`\end{itemize}`

■ `\textbf{ Bold Text }`

or `{\bf Enter text here }`

■ `\begin{center} \end{center}`

■ You can even do nested environments

`\begin{table}`

`\begin{tabular}`

`\end{tabular}`

`\end{table}`

## ■ Environments

- `\begin{environment} \end{environment}`
- `\begin{itemize}`
  - `\item Banana`
  - `\item Apple`
  - `\item Banapple`
- `\end{itemize}`
- `\textbf{ Bold Text }`  
or `{\bf Enter text here }`
- `\begin{center} \end{center}`
- You can even do nested environments

```
\begin{table}
\begin{tabular}
\end{tabular}
\end{table}
```

## ■ Environments

- `\begin{environment} \end{environment}`
- `\begin{itemize}`
  - `\item Banana`
  - `\item Apple`
  - `\item Banapple``\end{itemize}`
- `\textbf{ Bold Text }`  
or `{\bf Enter text here }`
- `\begin{center} \end{center}`
- You can even do nested environments

```
\begin{table}
\begin{tabular}
\end{tabular}
\end{table}
```

## ■ Environments

- `\begin{environment} \end{environment}`
- `\begin{itemize}`
  - `\item Banana`
  - `\item Apple`
  - `\item Banapple``\end{itemize}`
- `\textbf{ Bold Text }`  
or `{\bf Enter text here }`
- `\begin{center} \end{center}`

### ■ You can even do nested environments

```
\begin{table}
\begin{tabular}
\end{tabular}
\end{table}
```

## Theorem 1 (Inverse Function Theorem)

*Suppose that  $\varphi$  is a  $C^1$  function from an open set  $E$  of  $\mathbb{R}^n$  into  $\mathbb{R}^n$ , and suppose that  $\varphi'(a)$  is invertible for some  $a \in E$ . Put  $b = \varphi(a)$ . Then*

- 1** *there exist open sets  $U \subset E \subset \mathbb{R}^n$  and  $V \subset \mathbb{R}^n$  such that  $a$  is in  $U$ ,  $b$  is in  $V$ ,  $\varphi$  is one-one from  $U$  onto  $V$ , and*
- 2** *the inverse  $f : V \rightarrow U$  is of class  $C^1$ .*

*Consequently,  $f'(\varphi(x)) = \varphi'(x)^{-1}$  for  $x \in U$ .*

`\begin{Theorem}`

`\end{Theorem}`

## Definition 1 (Isometric)

If  $(X, d)$  and  $(Y, \rho)$  are two metric spaces, an **isometry** of  $X$  into  $Y$  is a function  $\varphi : X \rightarrow Y$  that preserves distances:  
 $\rho(\varphi(x_1), \varphi(x_2)) = d(x_1, x_2) \forall x_1 \text{ and } x_2 \text{ in } X$ .

## Theorem 2

*If  $(X, d)$  is a metric space, there there exist a complete metric space  $(X^*, \Delta)$  and an isometry  $\varphi : X \rightarrow X^*$  such that the image of  $X$  in  $X^*$  is dense.*

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```



```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```



```
\part{Part 1}
\chapter{Chapter 1}
\section{Section 1}
\section{Section 2}
\subsection{Subsection 1}
\chapter{Chapter 2}
\section*{No Number Section }
\section*{No Number Section }
\subsection*{Subsection}
\subsubsection*{Subsubsection}
\tableofcontents
```

Lets talk  
about  
spacing

Lets talk \ about \ spacing

Lets talk \newline  
about spacing

\LaTeX is annoying

\LaTeX\ is NOT annoying

Lets talk about spacing

Lets talk  
about  
spacing

Lets talk  
about spacing

L<sup>A</sup>T<sub>E</sub>X is annoying

L<sup>A</sup>T<sub>E</sub>X is NOT annoying

- 1 space between paragraphs indents, but just hitting enter and starting a new line doesn't
- `\newline` or `\\` doesn't cause indentation
- `\newline = \\`
- Can create or remove indent with `\indent` or `\noindent`
- Hacky way of spacing is using `\vspace{5mm}` or `\hspace{5mm}`

- 1 space between paragraphs indents, but just hitting enter and starting a new line doesn't
- `\newline` or `\\` doesn't cause indentation
- `\newline = \\`
- Can create or remove indent with `\indent` or `\noindent`
- Hacky way of spacing is using `\vspace{5mm}` or `\hspace{5mm}`

- 1 space between paragraphs indents, but just hitting enter and starting a new line doesn't
- `\newline` or `\\` doesn't cause indentation
- `\newline = \\`
- Can create or remove indent with `\indent` or `\noindent`
- Hacky way of spacing is using `\vspace{5mm}` or `\hspace{5mm}`

- 1 space between paragraphs indents, but just hitting enter and starting a new line doesn't
- `\newline` or `\\` doesn't cause indentation
- `\newline = \\`
- Can create or remove indent with `\indent` or `\noindent`
- Hacky way of spacing is using `\vspace{5mm}` or `\hspace{5mm}`

- 1 space between paragraphs indents, but just hitting enter and starting a new line doesn't
- `\newline` or `\\` doesn't cause indentation
- `\newline = \\`
- Can create or remove indent with `\indent` or `\noindent`
- Hacky way of spacing is using `\vspace{5mm}` or `\hspace{5mm}`

Your shirt is **BLUE!**

Your shirt is **RED!**

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text **{\green I want color!}** you need to type

`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

**\LARGE{This is Large!}**



Your shirt is BLUE!

Your shirt is RED!

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type

`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

`\LARGE{This is Large!}`

Your shirt is **BLUE!**

Your shirt is **RED!**

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type `\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

**\LARGE{This is Large!}**

Your shirt is BLUE!

Your shirt is RED!

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type

`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

`\LARGE{This is Large!}`

Your shirt is **BLUE!**

Your shirt is **RED!**

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type

`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

**\LARGE{This is Large!}**

Your shirt is BLUE!

Your shirt is RED!

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type

`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

`\LARGE{This is Large!}`

Your shirt is BLUE!

Your shirt is RED!

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type

`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

`\LARGE{This is Large!}`

Your shirt is BLUE!

Your shirt is RED!

\underline{ what's under the underline?}

- You have been trained at *Wudan!*  
from *Crouching Tiger Hidden Dragon*

Note: for coloring text `{\green I want color!}` you need to type  
`\usepackage{pstricks}`.

Don't worry about packages for now, that will come later. Just in case you want color.

**\LARGE{This is Large!}**

# Computer Access Codes

- Student user name: lcmfmath98
- Student password: c@1character
- CCN 98: 54194
- CCN 198: 54416
  - We will give out CECs individually



# Exercise

Create a T<sub>E</sub>X typeset with the following:

- 1 sections and subsections
- 2 create a list using `\begin{enumerate}` and `\begin{itemize}`
- 3 use different text formatting (ie Bold, Italics, Underline, small, large, etc...)
- 4 include a title, name, and date today
- 5 use the center/ leftflush / rightflush environment
- 6 use two of the reserved characters