this is a title

pl and 0x00-pl

the date is today

${\bf Contents}$

1	section 0 哈哈 I₄TEX	1					
2	compile 2.1 MakeFile 2.2 sections 2.2.1 set section counter	1 1 1					
3	contents 你好 PTEX						
4	strings						
5	formulas						
6	left and right						
7	something verbatim						
8	colors						
9	images						
10	size and fount 10.1 size	4 4					
11	lists	4					
12	turn and rotate	4					
	tables 13.1 tabular	5					

14	vector image: gnuplot	5
	14.1 set format	5
	14.2 plot sin	5
	14.3 save file	5
	14.3.1 import	5
15	notation and reference	5
	15.1 structure	5
	15.2 more on figure	6
	15.3 footnote	6
	15.4 hyper link	6
16	common errors – part 4 of the lecture	6
	16.1 errors and warings	6
	16.2 lengths	6
	16.3 counters	6
	16.4 boxes	6
	16.5 rules and struts	7
17	mathematics and computers – part 5 of the lecture	7
	17.1 methmatics packages and useage	7
	17.2 computers heigh light	7
18	chem and language – part 6	8
	18.1 chem	8
	18.2	8
1	section 0 哈哈 IATEX	
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	L)	

2 compile

2.1 MakeFile

latex hello-latex.text dvipdfm hello-latex.dvi

2.2 sections

\section \subsection \subsubsection \paragraph \subparagraph

2.2.1 set section counter

 $\operatorname{section}{3}$

3 contents 你好 降TEX

first contents 你好 卧下X

You can mix latin letters and chinese.

4 strings

this is some text of content of "this" subsection. this is another line of content.

5 formulas

$$B^2 = \mathbf{B} \times B$$
$$A[3] \text{ is } A_3$$

6 left and right

\centering{centering}
\begin{center}
center
\end{center}

7 something verbatim

8 colors



Figure 1: title of image

9 images





Figure 2: 2 images

10 size and fount

10.1 size

footnotesize small normalsize large Large LARGE huge

10.2 fount

testnormal normalfont texttt ttfamily textbf bfseries testit itshape

11 lists

- \bullet item 1
- \bullet item 2

12 turn and rotate

see the difference: prev line turn 30 deg and rotate deg nextline

13 tables

13.1 tabular

 $\frac{\text{this is a tabular:}}{3 \times 3 \text{ matrix}}$ ex

	3×3 matrix			ex		
	11	12	13			
Ì	21	22	23	1111	1111	1111
Ī	31	32	33	34	35	36

14 vector image: gnuplot

14.1 set format

set term postscript eps enhanced color font 'Times. 24' set output 'sin.eps'

14.2 plot sin

 $plot \sin(x)$

14.3 save file

set term x11 set output

14.3.1 import

use graphicx package and includegraphics command

15 notation and reference

15.1 structure

```
\lable{marker} % define marker
...
\ref{marker} % ref marker
...
\pageref{marker} % page of marker
we can ref the (figure:2img): 9
at page: 4
```

15.2 more on figure

on

\begin{figure}[!t]

the [!t] notation means force the image shows on the top of the page. ps:

- [!h] means put it here.
- [!t] means put it on top.
- [!b] means put it on bottom.
- [!p] means put it into another page.

15.3 footnote

this is the footnote ¹

15.4 hyper link

16 common errors – part 4 of the lecture

16.1 errors and warings

```
\{\} miss match: Too many \}'s letter wrong like \delta e\{Mar.2014\}: Undifined control sequence not in math mode: Not in Mathematics Mode. image or box are too large: Bad Boxes! missing packages: Missing Packages
```

16.2 lengths

normally don't override textlength setting or something like that.

16.3 counters

not normally used

16.4 boxes

```
add box on the text or something use \framebox
```

¹the footnote text is here

16.5 rules and struts

make some area black or something like that using \rule command

17 mathematics and computers – part 5 of the lecture

17.1 methmatics packages and useage

```
\label{eq:continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous_continuous
```

Proof. proof of something. proof detail.

17.2 computers heigh light

```
\label{listings} $$ \sup_{color} \end{myred}_{color} $$ \end{myred}_{color}_{myred}_{color}_{myreen}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{color}_{c
```

```
public class Factorial
{
    public static void main(String[] args)
    { ... }
    public static int factorial(int n)
    { ... }
}
```

18 chem and language – part 6

18.1 chem

```
\uspackage[version=3]{mhchem}
\uspackage{chemfig}
\chemfig{
   *6(=([:270]-\ce {NO2})-=([:45]-\ce {NO2})-(-)=([:135]-\ce {NO2})-)
}
```

18.2