

Latex 常用方法

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1 插入图片

1.1 方法一

导包:

```
\usepackage{graphicx}
\usepackage{subfigure}
\usepackage{float}
```

代码:

```
\begin{figure}[H]
  \centering
  \includegraphics[scale=0.2]{1.png}
  \caption{你好}
\end{figure}
```

图 1:

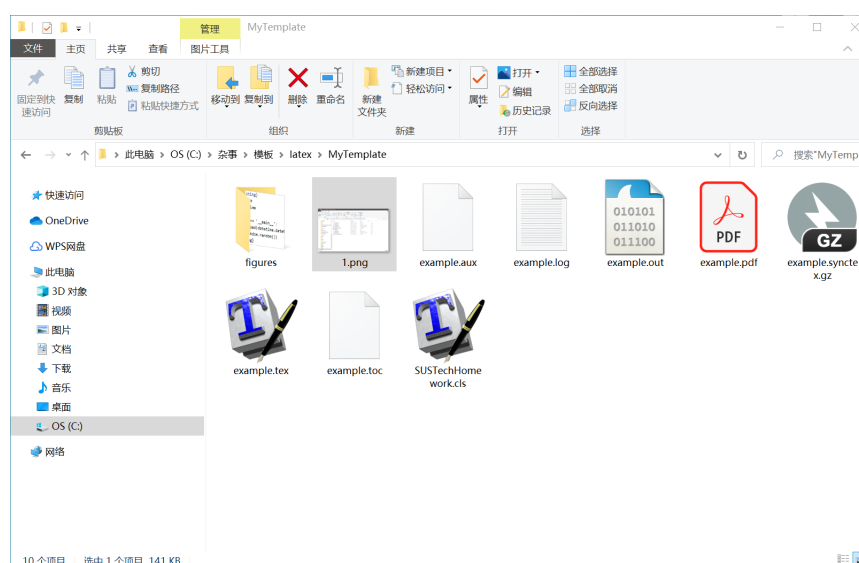


Figure 1: 你好

1.2 方法二

```
\centering
\includegraphics[width=7cm,height=4cm]{figures/1.png}
\caption{你好}
```

图 2:

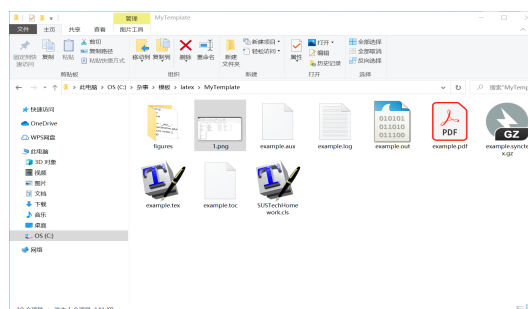


Figure 2: 你好

2 代码块

```
\begin{lstlisting}[title = \textbf{hello.py}] % Edit title here. Edit code style in lstset of cls document.
import random
import datetime

if __name__ == '__main__':
    random.seed(datetime.datetime.now())
    print(random.random())
\end{lstlisting}
```

Figure 3: 代码块

Example:

hello.py

```
import datetime

if __name__ == '__main__':
    random.seed(datetime.datetime.now())
    print(random.random())
```

3 排版

3.1 段落

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

3.2 空行

```
\vspace*{n\baselineskip}
\\
\newline
\par
```

1=====

1=====

2=====

2=====

3.3 换页

```
\thispagestyle{empty}
```

3.4 页码

```
\setcounter{page}{1} 从此页开始1 2 3
\thispagestyle{empty} 此页无页码
```

3.5 目录

```
\tableofcontents
```

3.6 列表

3.6.1 参考链接:

导包:

```
\hypersetup{hidelinks ,  
    colorlinks=true ,  
    allcolors=blue ,  
    pdfstartview=Fit ,  
breaklinks=true }
```

代码:

```
\href{https://www.cnblogs.com/ahhylau/p/4586167.html}{https://www.cnblogs .  
    com/ahhylau/p/4586167.html}
```

<https://www.cnblogs.com/ahhylau/p/4586167.html>

3.6.2 案例

```
\begin{enumerate}  
  \item This is the first item  
  \begin{enumerate}  
    \item sub1  
    \item sub2  
  \end{enumerate}  
  \end{enumerate}  
  \item This is the second item  
  \item This is the third item  
\end{enumerate}  
\begin{itemize}  
  \item This is the first item  
  \begin{itemize}  
    \item sub1  
    \item sub2  
    \item sub3  
  \end{itemize}  
  \end{itemize}  
  \item This is the second item  
  \item This is the third item  
\end{itemize}
```

1. This is the first item
 - (a) sub1
 - (b) sub2
2. This is the second item
3. This is the third item
 - This is the first item
 - sub1
 - sub2
 - sub3
 - This is the second item
 - This is the third item

4 公式

4.1 行内公式

\$ 公式 \$

我们知道: $\theta = 2\pi$, \therefore proof is right.

4.2 行间公式

\$\$
公式
\$\$

狗屁不通的定理:

$$\theta * \gamma = \gamma * \alpha$$

5 表格

在线生成表格

知乎讲解

```
\begin{table}[H]
\begin{tabular}{|l|l|l|l|l|l|}
\hline
A&1 &2 &3 &4 &\ \ \hline
B&5 &6 &7 &8 &\ \ \hline
C&9 &10 &11 &12 &\ \ \hline
D&13 &14 &15 &16 &\ \ \hline
\end{tabular}
\end{table}
```

A	1	2	3	4
B	5	6	7	8
C	9	10	11	12
D	13	14	15	16

6 文本框

```
\begin{center}
\fcolorbox{black}{\gray!5}{
\parbox{1\linewidth}{
The first Line.\ \
The second Line.\ \
$\theta=A*B$
}
}
\end{center}
```

The first Line.
The second Line.
 $\theta = A * B$

7 Algorithm

Algorithm Design

```

\begin{algorithm}
  \caption{Calculate  $y = x^n$ }
  \label{alg1}
  \begin{algorithmic}
    \REQUIRE  $n \geq 0 \vee x \neq 0$ 
    \ENSURE  $y = x^n$ 
    \STATE  $y \leftarrow 1$ 
    \IF{ $n < 0$ }
      \STATE  $X \leftarrow 1 / x$ 
      \STATE  $N \leftarrow -n$ 
    \ELSE
      \STATE  $X \leftarrow x$ 
      \STATE  $N \leftarrow n$ 
    \ENDIF
    \WHILE{ $N \neq 0$ }
      \IF{ $N$  is even}
        \STATE  $X \leftarrow X \times X$ 
        \STATE  $N \leftarrow N / 2$ 
      \ELSE[ $N$  is odd]
        \STATE  $y \leftarrow y \times X$ 
        \STATE  $N \leftarrow N - 1$ 
      \ENDIF
    \ENDWHILE
  \end{algorithmic}
\end{algorithm}

```

Algorithm 1 Calculate $y = x^n$

Require: $n \geq 0 \vee x \neq 0$

Ensure: $y = x^n$

```

 $y \leftarrow 1$ 
if  $n < 0$  then
   $X \leftarrow 1/x$ 
   $N \leftarrow -n$ 
else
   $X \leftarrow x$ 
   $N \leftarrow n$ 
end if
while  $N \neq 0$  do
  if  $N$  is even then
     $X \leftarrow X \times X$ 
     $N \leftarrow N/2$ 
  else { $N$  is odd}
     $y \leftarrow y \times X$ 
     $N \leftarrow N - 1$ 
  end if
end while

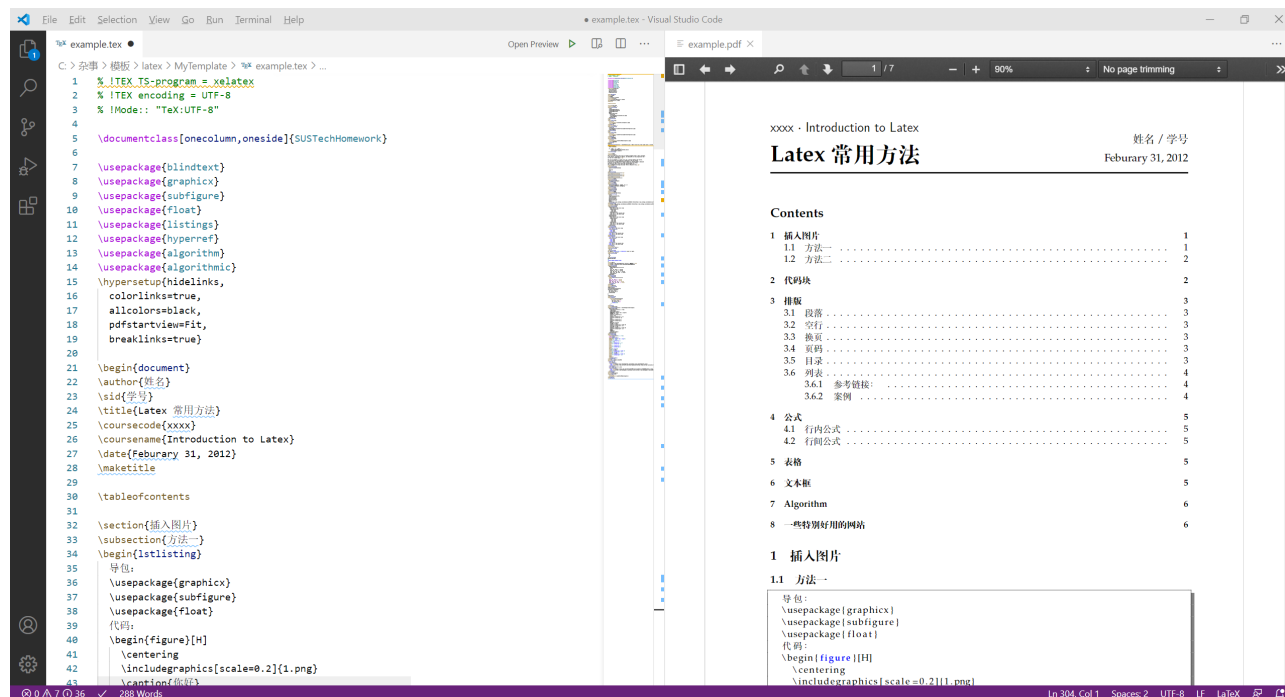
```

8 一些特别好用的网站

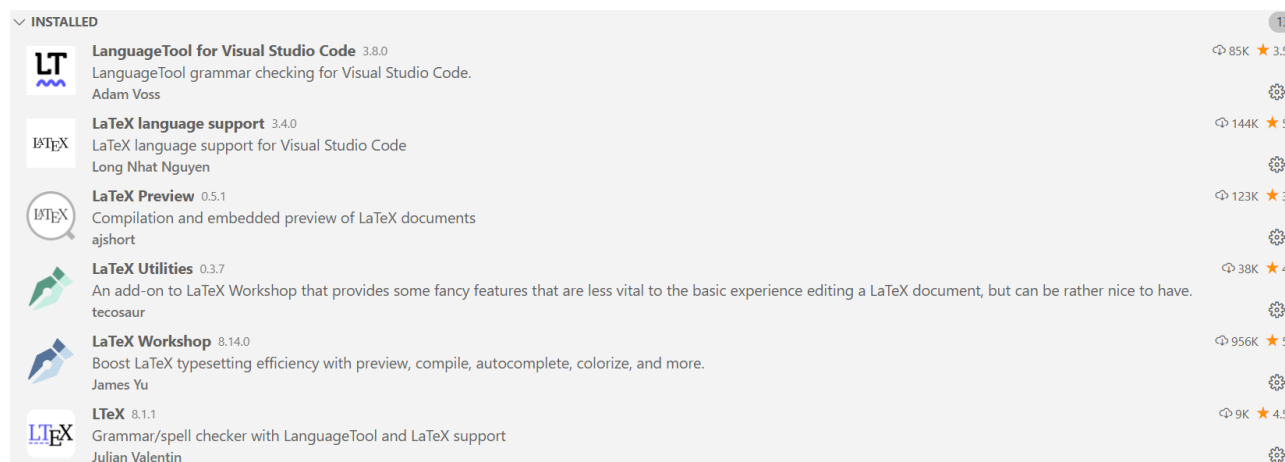
- 模板：

- <http://www.latextemplates.com/>
- <https://www.overleaf.com/latex/templates/>
- Latex 常用公式总结:
 - <https://blog.csdn.net/GarfieldEr007/article/details/51646604>
 - <https://www.moonpapers.com/manual/latex/>

9 IDE 的选择



- 不得不说, vscode 十分好用。(代码提示 + 代码补全 + 英语语法纠错)
- 需要的插件:



10 致谢

本文采用了学长提供的通用模板并略作修改, 在此表示衷心的感谢。