实验报告一

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1 Latex

1.1 练习内容

1. 导入宏包
2. 注释
3. 标题
4. 作者
5. 日期
6. 段落缩进
7. 换行
8. 斜体
9. 各种字体
10. 字体颜色
11. 字体大小
12. 特殊字符
13. 设置章节段落
14. 设计表格

15. 分点列表
16. 插入图片
17. 插入公式
18. 数学符号
19. 希腊数字
20. 引用文献
21. 导入pdf文件
22. 插入代码块

1.2 结果(以下5页pdf)

My first Document

肖予纯

2024/8/25

My homework

First. Latex with 20 points.

Some text with *emphasis and* nested *context*

Some text with *italic and nested context*

words slanted

WORDS IN SMALLCAPS

words in bold

`words in teletype`

roman words

underlined words

words are red colorbox is green words are red and box is yellow

normal size tiny size

script size

footnote size

small size

large size

Large size

LARGE size

huge size

特殊字符： # $ % ^ & _ { } ~

1 Title of the first section

1.1 Subsection of the first section

1.1.1 subsection of the first subsection

paragraph one

2 Second section

Apples	Green
Strawberries	Red
Orange	Orange

Apples	Green
Strawberries	Red
Oranges	Orange

two kinds of list:

1. An entry
2. Another One
3. Wow! Three entries

- An entry
- Another One
- Wow! Three entries

A ‘A’作为标号

$1 + 2 = 3$

$$1 + 2 = 3$$

$$1 + 2 = 3 \tag{1}$$

图 1: Here is my image

n^2

2_a

$b\breve{}\breve{}a - 2$

$$\frac{a}{3}$$

$$\sqrt{y^2}$$

$$\sqrt[x]{y^2}$$

$$3$$

$$\sum_{x=1}^{5} y^z$$

$$\int_a^b f(x)$$

$\aleph\ \beta\ \delta\ \Delta\ \pi, \Pi$

这是我引用的第一篇文献[1]。

第二篇[2]

[3]

参考文献

[1] Zhou Wang, A.C. Bovik, H.R. Sheikh, and E.P. Simoncelli. Image quality assessment: from error visibility to structural similarity. *IEEE Transactions on Image Processing*, 13(4):600–612, 2004.

[2] Xinshun Wang, Wanying Zhang, Can Wang, Yuan Gao, and Mengyuan Liu. Dynamic dense graph convolutional network for skeleton-based human motion prediction. *IEEE Transactions on Image Processing*, 33:1–15, 2024.

[3] 白中英. 计算机组成原理, 2000.

附上代码块：

```
#include <iostream>
using namespace std;

int main()
{
        cout<<"hello"<<endl;
        return 0;
}
```

1.3 代码部分(图1)

2 Git

2.1 练习内容

1. git init 初始化Git仓库
2. git add file/git commit -m message添加文件到仓库
3. git status 掌握工作区状态
4. git diff 查看修改内容
5. git log 查看提交历史
6. git reset –hard commitid 穿梭各个历史版本
7. git reflog 查看命令历史
8. git checkout – file 丢弃工作区的修改
9. git reset HEAD file 丢弃暂存区的修改，回到工作区的修改状态
10. git rm file 从版本库删除该文件
11. git remote add origin git@server-name:path/repo-name.git 关联一个github远程仓库
12. git push -u origin master 第一次推送master分支的所有内容
13. git push origin master 推送最新修改
14. git remove rm origin 解除了本地和远程的绑定关系
15. git clone git@github.com:server-name/repo-name.git从远程库克隆

2.2 结果(图2)

2.3 代码部分（图3）

3 感悟

本来打算用listings宏包里的lstlisting的功能附上代码，但是好像只支持C、C++、Python等语言，把Latex的代码附上不容易，到现在也不知道如何解决，所以用图片的方式附上代码。

4 Github

```latex
\documentclass[a4paper, 12pt]{article}
\usepackage{graphicx}
\usepackage[UTF8]{ctex}
\usepackage{color}
\usepackage{pdfpages}
%文档类型（较短的文章、报告）纸张大小为A4，文字大小为12pt
%还有其他文档类型如report（更长的文档）、proc（会议论文）、book、beamer、slides
\begin{document}
    %每个文档都有一个begin{document}和end{document}，两者之间是文档的主体，begin之前是文档导言区
    \title{My first Document}
    \author{肖予纯}
    \date{2024/8/25}
    \maketitle
    %锻炼顶格 \\表示换行
    \noindent   My homework \\First. Latex with 20 points.
    \\%换行

    %斜体
    Some text with \emph{emphasis and \emph{nested} context}%可嵌套使用

    Some text with \textit{italic and \textit{nested} context}%不可嵌套使用
    \\
    \textsl{words slanted}\\
    %小号的大写字母
    \textsc{words in smallcaps}\\
    %加黑
    \textbf{words in bold}\\
    %电传机的字体
    \texttt{words in teletype}\\
    %罗马字体
    \textrm{roman words}\\
    %下划线字体
    \underline{underlined words}\\

    %使用颜色
    {\color{red}words are red}
    \colorbox{green}{colorbox is green}
    \colorbox{yellow}{{\color{red}words are red and box is yellow}}
    %字体大小
    \\
    normal size
    {\tiny tiny size}\\
    {\scriptsize script size}\\
    {\footnotesize footnote size}\\
    {\small small size}\\
    {\large large size}\\
    {\Large Large size}\\
    {\LARGE LARGE size}\\
    {\huge huge size}\\
```

```latex
%特殊字符，为了使用这些字符，需要在他们前面添加反斜杠进行转义
特殊字符:
\# \$ \% \^{} \& \_ \{ \} \~{}

%章节
\section{Title of the first section}
\subsection{Subsection of the first section}
\subsubsection{subsection of the first subsection}
\paragraph{paragraph one}
\section{Second section}
%表格
\begin{tabular}{|l|l|}
    Apples       & Green  \\% 符号'&'用于分割列
    \cline{1-1}Strawberries & Red    \\
    Orange       & Orange \\
\end{tabular}
\\
\begin{tabular}{rc}
    Apples              & Green  \\
    \hline  %分割行
    Strawberries        & Red    \\
    \cline{1-2} Oranges & Orange \\ %在第一列和第二列之间插入横线
\end{tabular}
%列表
\\
\\two kinds of list:
\begin{enumerate}
    \item An entry
    \item Another One
    \item Wow! Three entries
\end{enumerate}
\begin{itemize}
    \item An entry
    \item[-] Another One
    \item[+] Wow! Three entries
    \item[A] ‘A’作为标号
\end{itemize}
%插入图片
\begin{figure}[p]%p表示另起一页放置图片
    \centering
    \includegraphics[width=1\textwidth]{image}
    \caption{Here is my image}
    \label{image-myimage}
\end{figure}
```

```
    %插入公式
    $1+2=3$
    $$1+2=3$$\\%有行间的公式
    %有标号的公式
    \begin{equation}
        1+2=3
    \end{equation}
    %数学符号
    $n^2$\\%上标
    $2_a$\\%下标
    $b—{a-2}$\\%上、下标含有多个字符
    $$\frac{a}{3}$$\\%分数,可嵌套
    $$\sqrt{y^2}$$\\%根号
    $$\sqrt[x]{y^2}$$\\
    $$\sum_{x=1}^5 y^z$$\\%求和
    $$\int_a^b f(x)$$\\%积分
    %希腊字母
    $\aleph$
    $\beta$
    $\delta$
    $\Delta$
    $\pi,\Pi$
    \\这是我引用的第一篇文献\cite{1284395}。\\
    第二篇\cite{10335618}\\
    \cite{666}
    \newpage
    %插入文献
    \bibliographystyle{unsrt}
    \bibliography{reference}
    %导入pdf
    %\includepdf{document.pdf}


\end{document}
```

图 1: codes of Latex

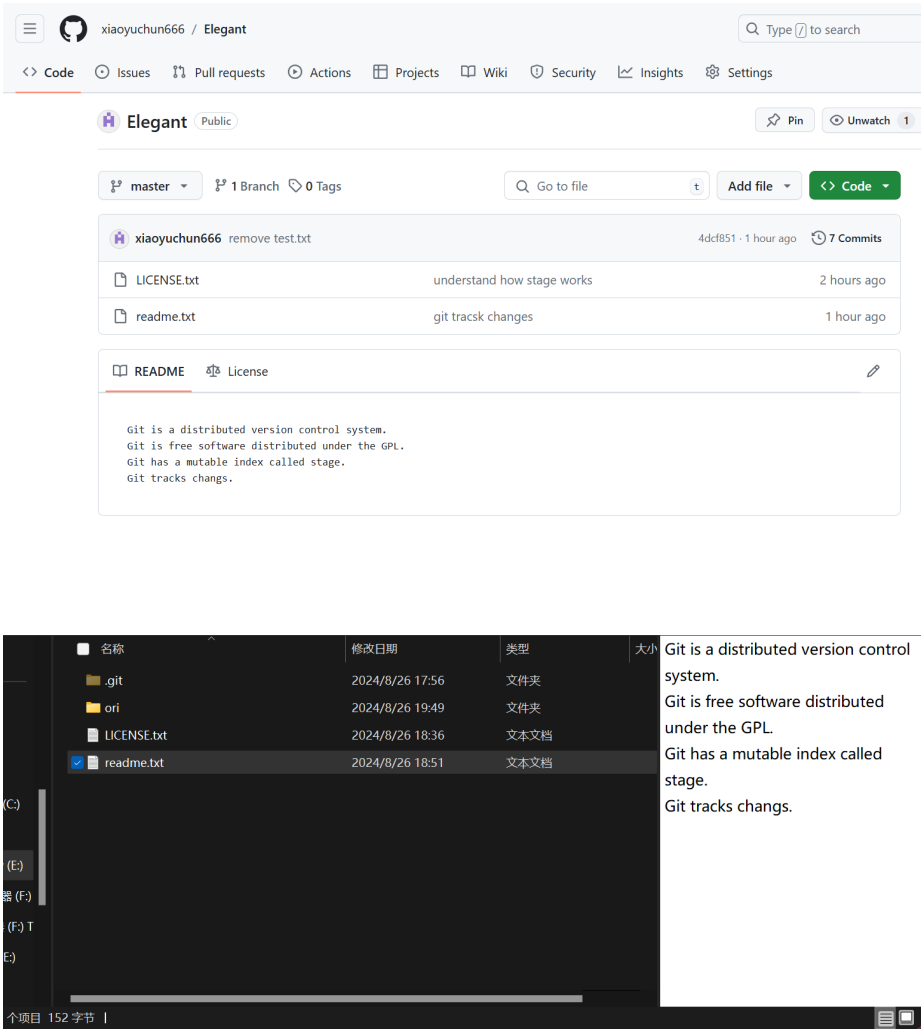

图 2: result of Git

```
肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit
$ git init
Initialized empty Git repository in E:/学习资料/三夏/系统开发工具实践/实验1-git/learngit/.git/

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git add readme.txt

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git commit -m "wrote a readme file"
[master (root-commit) 85863f6] wrote a readme file
 1 file changed, 2 insertions(+)
 create mode 100644 readme.txt

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   readme.txt

no changes added to commit (use "git add" and/or "git commit -a")

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git diff
diff --git a/readme.txt b/readme.txt
index d8036c1..013b5bc 100644
--- a/readme.txt
+++ b/readme.txt
@@ -1,2 +1,2 @@
-Git is a version control system.
+Git is a distributed version control system.
 Git is free software.
\ No newline at end of file

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git add readme.txt

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   readme.txt


肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git commit -m "add distributed"
[master 4b73844] add distributed
 1 file changed, 1 insertion(+), 1 deletion(-)

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git status
On branch master
nothing to commit, working tree clean

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git add readme.txt

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git commit -m "append GPL"
[master def93f5] append GPL
 1 file changed, 1 insertion(+), 1 deletion(-)
```

```
肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git log
commit def93f50bd0c1b1e7dcdadb8942dea7c712211b3 (HEAD -> master)
Author: xiaoyuchun <3245329682@qq.com>
Date:   Mon Aug 26 18:12:25 2024 +0800

    append GPL

commit 4b73844c9e4a00fc9ba090482ce3faddbc9678d5
Author: xiaoyuchun <3245329682@qq.com>
Date:   Mon Aug 26 18:07:17 2024 +0800

    add distributed

commit 85863f6d984c1047195d5c4a1e253b16ccb614c5
Author: xiaoyuchun <3245329682@qq.com>
Date:   Mon Aug 26 18:04:19 2024 +0800

    wrote a readme file

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git log --pretty=oneline
def93f50bd0c1b1e7dcdadb8942dea7c712211b3 (HEAD -> master) append GPL
4b73844c9e4a00fc9ba090482ce3faddbc9678d5 add distributed
85863f6d984c1047195d5c4a1e253b16ccb614c5 wrote a readme file

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git reset --hard HEAD^
HEAD is now at 4b73844 add distributed

肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ cat readme.txt
Git is a distributed version control system.
Git is free software.
肖予纯@LAPTOP-8H9PA221 MINGW64 /E/学习资料/三夏/系统开发工具实践/实验1-git/learngit (master)
$ git log
commit 4b73844c9e4a00fc9ba090482ce3faddbc9678d5 (HEAD -> master)
Author: xiaoyuchun <3245329682@qq.com>
Date:   Mon Aug 26 18:07:17 2024 +0800

    add distributed

commit 85863f6d984c1047195d5c4a1e253b16ccb614c5
Author: xiaoyuchun <3245329682@qq.com>
Date:   Mon Aug 26 18:04:19 2024 +0800
```