

TA class for Markdown and R

Markdown

Jingyu He

WISE

A Brief Introduction of Markdown

Markdown: Markdown is a lightweight markup language based on the formatting conventions that people naturally use in email.

In the course, you are required to use Markdown/R markdown to write your homework.

Markdown Online Programming:

- [dillinger](#)
- [stackedit](#)

Markdown Local Programming:

- Windows : MarkdownPad. Download from (<http://markdownpad.com>)
- Mac: Mou. Download from (<http://25.io/mou>)

Markdown Grammar

1. Headers. Use “#” to distinguish different titles. n“#” means the nth header. example: #hello world!

```
# hello world!
```

```
## hello world!
```

```
### hello world!
```

• **hello world!**

• **hello World!**

• **hello world!**

2. Emphasis. we use different symbol and symbol combination to emphasize words , sentences or paragraphs. example:

```
**Bold**
```

```
__Bold__
```

```
*ilatic*
```

```
_ilatic_
```

```
~~delete~~
```

```
UP~down~
```

```
^UP^down
```

```
==highlight==
```

- **Bold**
- **Bold**
- *ilatic*
- *ilatic*
- ~~delete~~
- UP_{down}
- ^{UP}down
- highlight

3. Enter: double enter

4. Ordered list:

```
use "number"+"\"."
```

- 1.hello world
- 2.hello world
- 3.hello world

5. Unordered list:

```
only use "+" or "-"
```

- + hello
- + world
- +

- hello
- world

-

6. Citation:

```
use ">" and ">>"
> hello world!
>> hello world!
```

- *hello world!*
- *hello world!*

7. Paragraph: A paragraph is composed of one or more consecutive text lines,
It needs more than one blank line before and after the display
(which looks like empty)

8. Linkages: insert webpage links.

```
+ this is [baidu](https://www.baidu.com/)
+ <https:www.baidu.com>
```

- this is [baidu](https://www.baidu.com/)
- [https:www.baidu.com](https://www.baidu.com/)

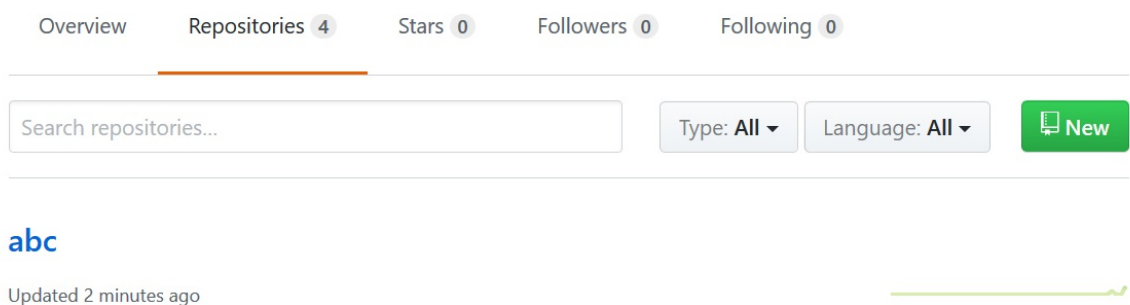
9. Pics: you can insert pictures from the Internet or your own pc.
Example: "!"+"[name]"+"(links)"

```
![cz](http://img4.duitang.com/uploads/item/201508/19/20150819131018_vYPyR.thumb.224_0.png)
```

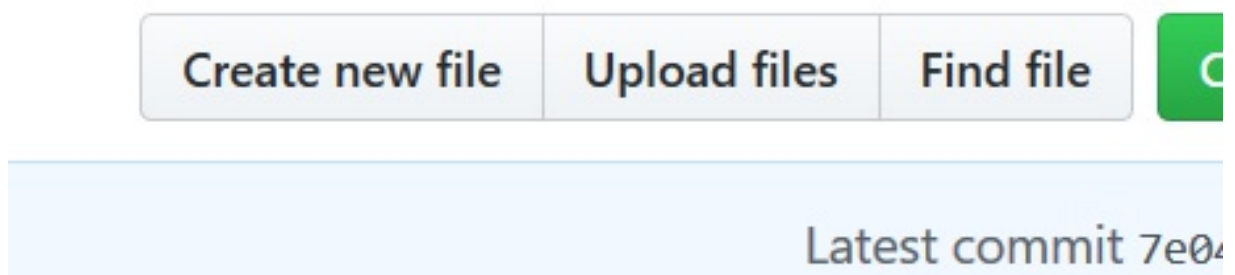


Tips: if you use online markdown programming, it's more convenient to insert online pics. Upload your local pics via Github or Weibo.

- step 1: create a new repositories



- step 2: upload your local pics to github





Drag files here to add them to your repository

Or [choose your files](#)

Add files via upload

Add an optional extended description...

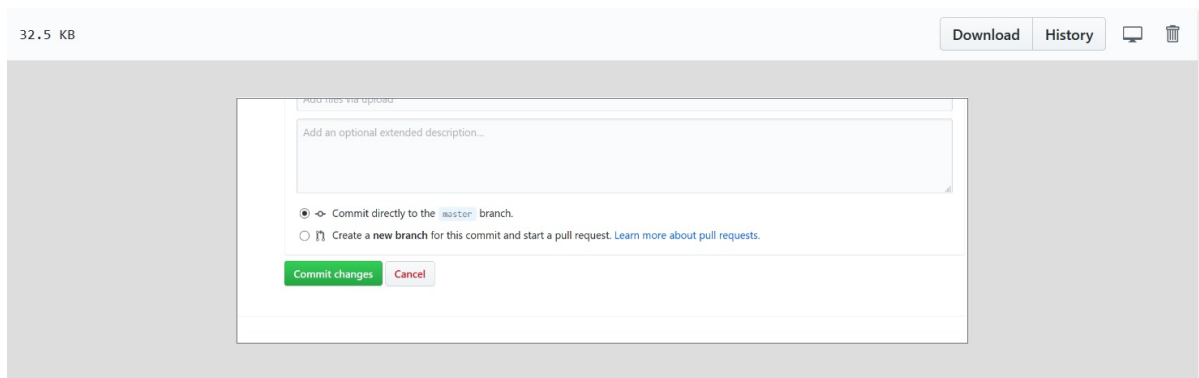
☒ Commit directly to the `master` branch.

☐ Create a new branch for this commit and start a pull request. [Learn more about pull requests.](#)

Commit changes

Cancel

- step 3: copy the path of the pic and insert into your markdown



Done!

10. Math grammar:based on Latex Grammar

-[math](#)

-[cheatsheet](#)

11. R markdown

- R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS.

download R from [R-project](#)

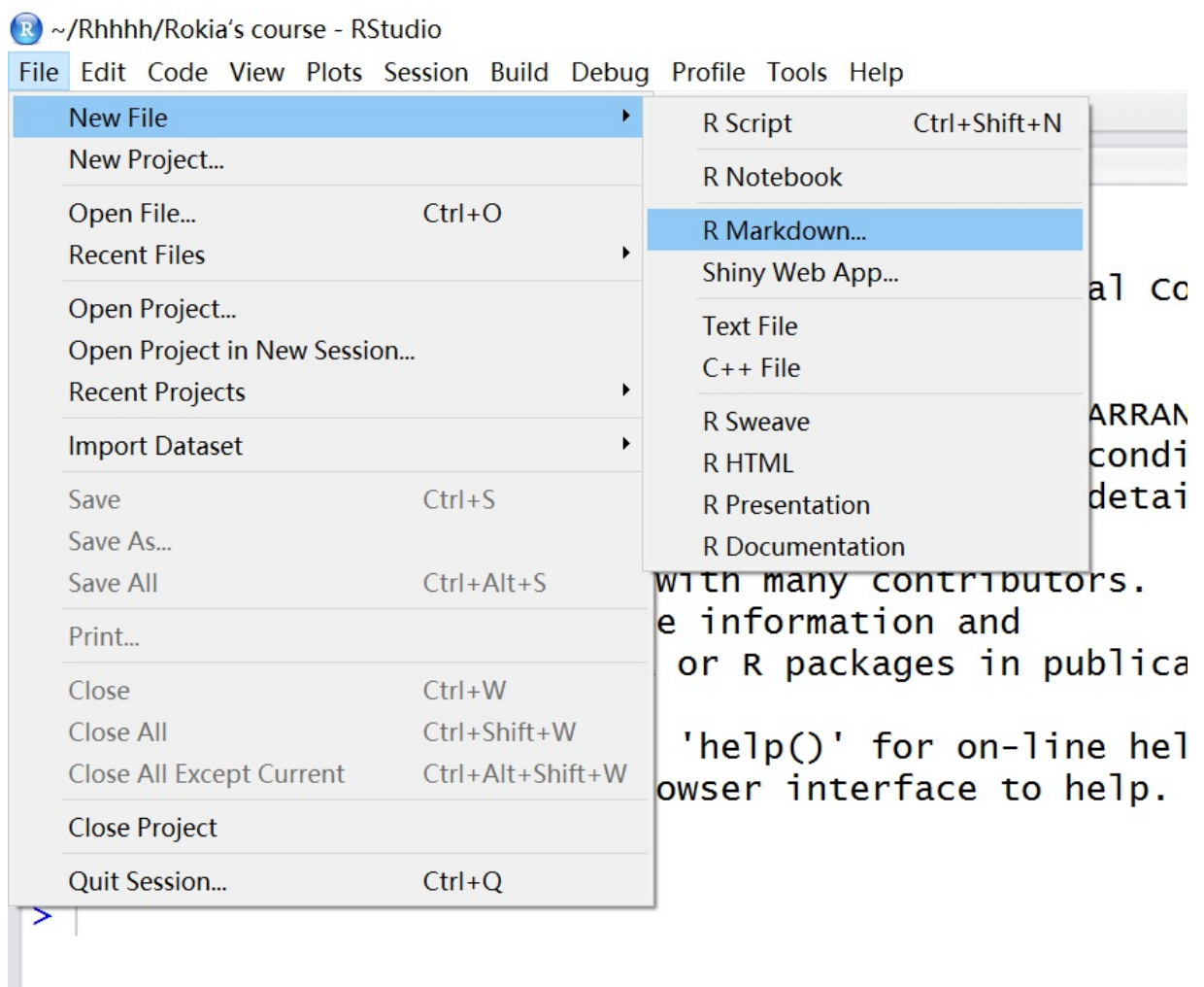
download R studio [Rstudio](#)

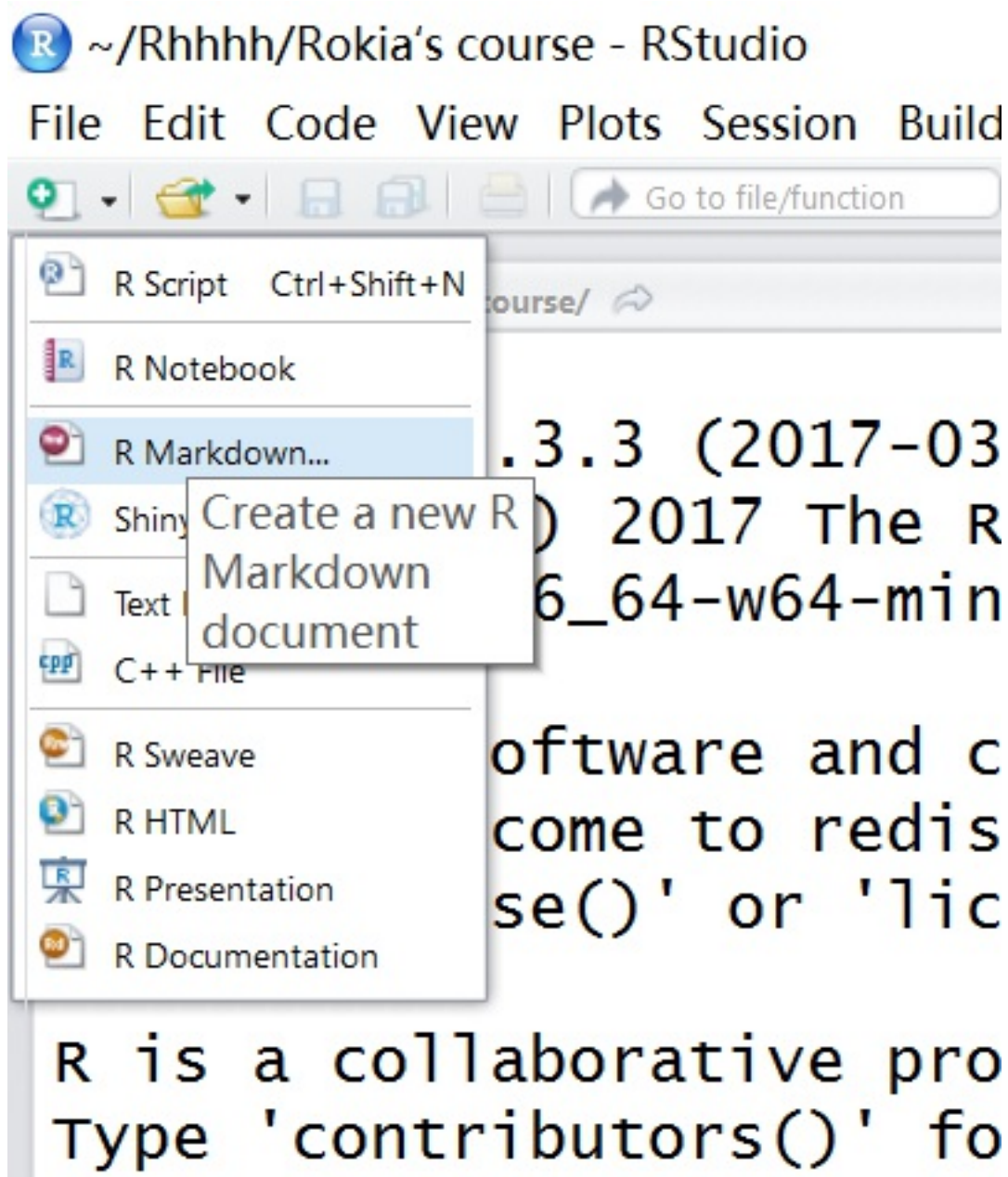
Install CTeX for Windows [Ctex](#)

Install mactex for Mac [mactex](#)

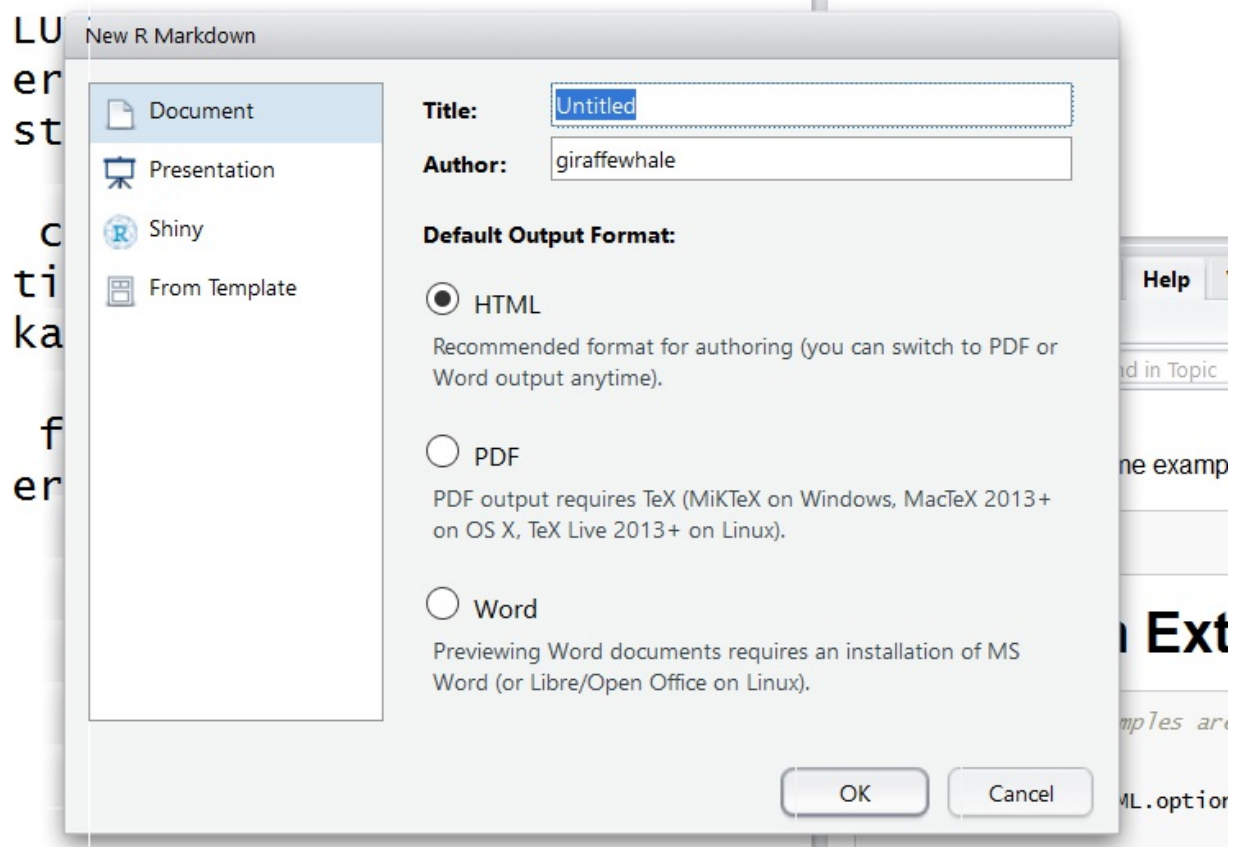
- Use Rstudio to write R markdown

1. Open your Rstudio->New Project->New Directory(or Existing Directory)
2. open a new R markdown





3. choose the default markdown output format



4. start write your first R markdown

```

1 ---
2 title: "test"
3 author: "giraffewhale"
4 date: "2017年10月20日"
5 output: pdf_document
6 ---
7
8 {r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple

```

5. Export your masterpieces!



- R markdown Grammar: similar to Latex Grammar.
- Insert pics from Internet
- Insert pics from local pc: copy the location of your picture and paste, eg. "C:\Users\jy\Pictures\Camera Roll"

wait!

```
![show1](C:\\Users\\jy\\Pictures\\Camera Roll\\show1.png)
```

```
![show1](C:/Users/jy/Pictures/Camera Roll/show1.png)
```