

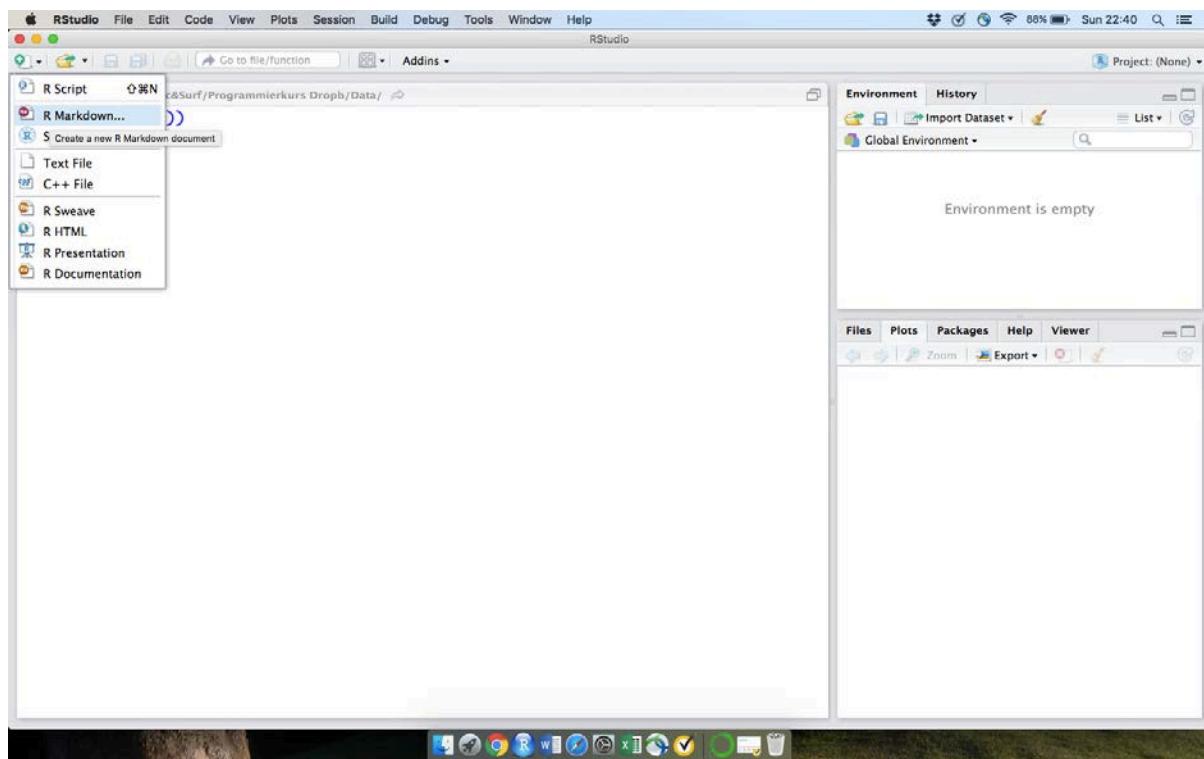
Getting ready for RMarkdown

RMarkdown is a framework that is integrated into RStudio. It allows for producing documents that directly integrate output from running R code, as well as text. Importantly, it is possible to program pieces of text, such that the text can react to output from running R code.

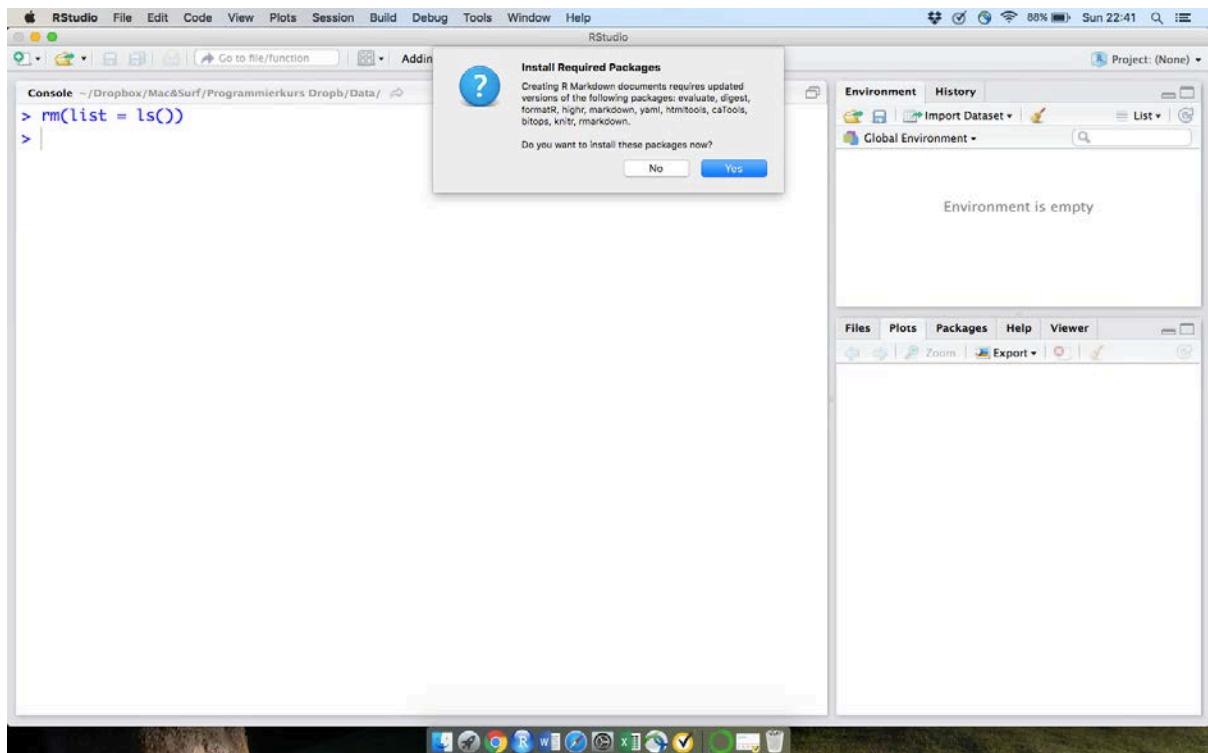
RMarkdown allows for compiling documents into html and pdf format. Word is also a possibility, but the functionality is quite reduced, compared to html and pdf. In order to enable RMarkdown, you have to install the RMarkdown package (see below). To compile documents to pdf format you may also have to install Latex, depending on your system. All relevant installations are explained below, separately for Macs and Windows.

Getting ready for RMarkdown on a Mac

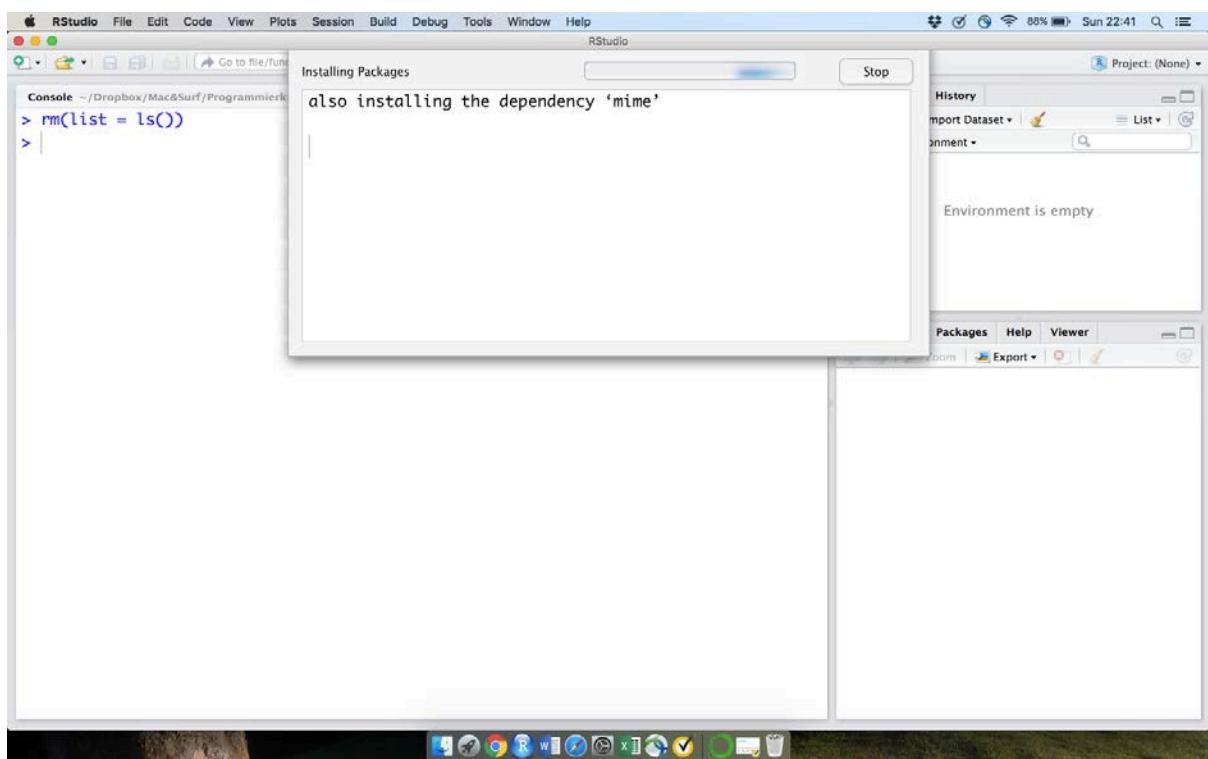
Open RStudio and choose “R Markdown” from the little plus menu as shown below.



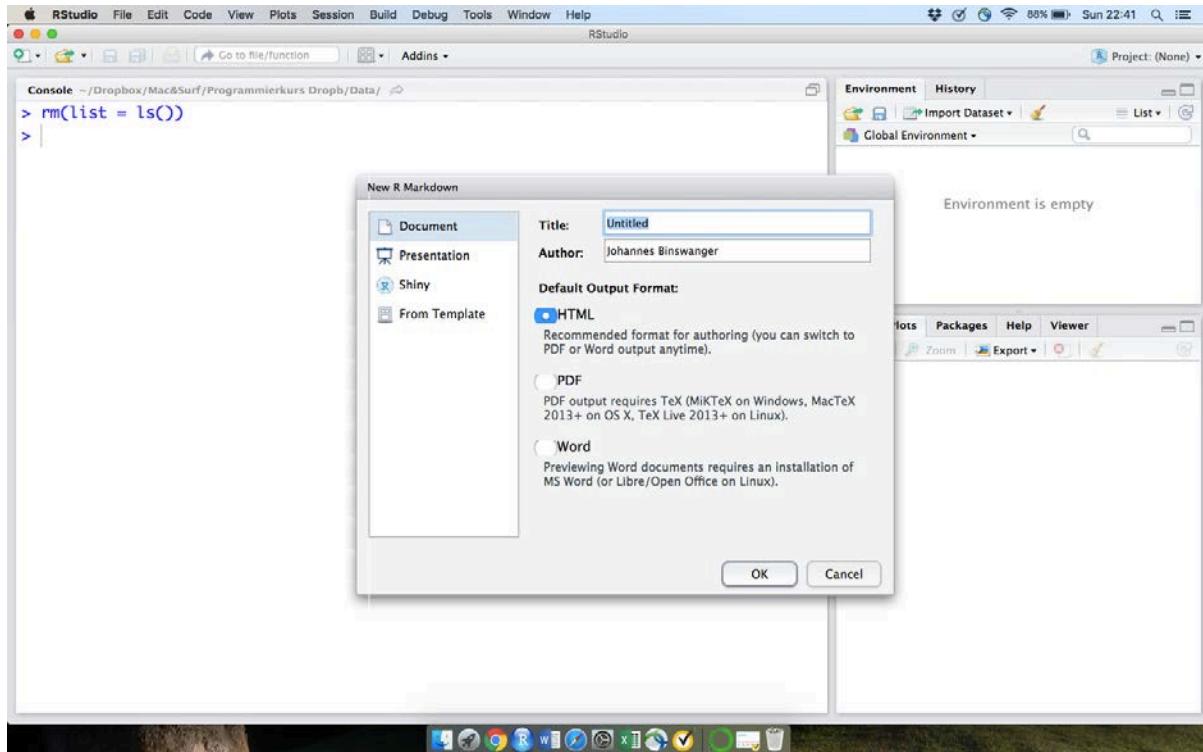
RStudio notices that this requires some new packages. Just click Yes.



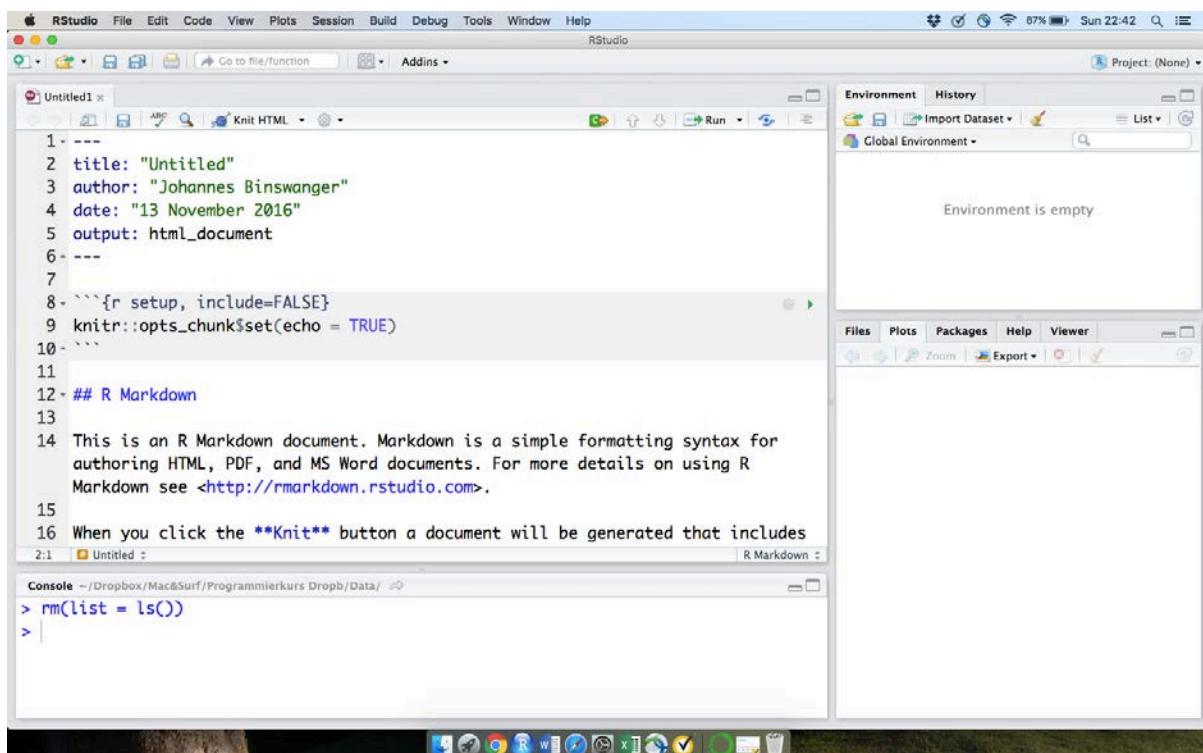
The installation is then running...



Now RStudio is ready for the compilation of a sample document that it provides. Just check it out, keep title and author as suggested, and choose HTML. Confirm with OK.

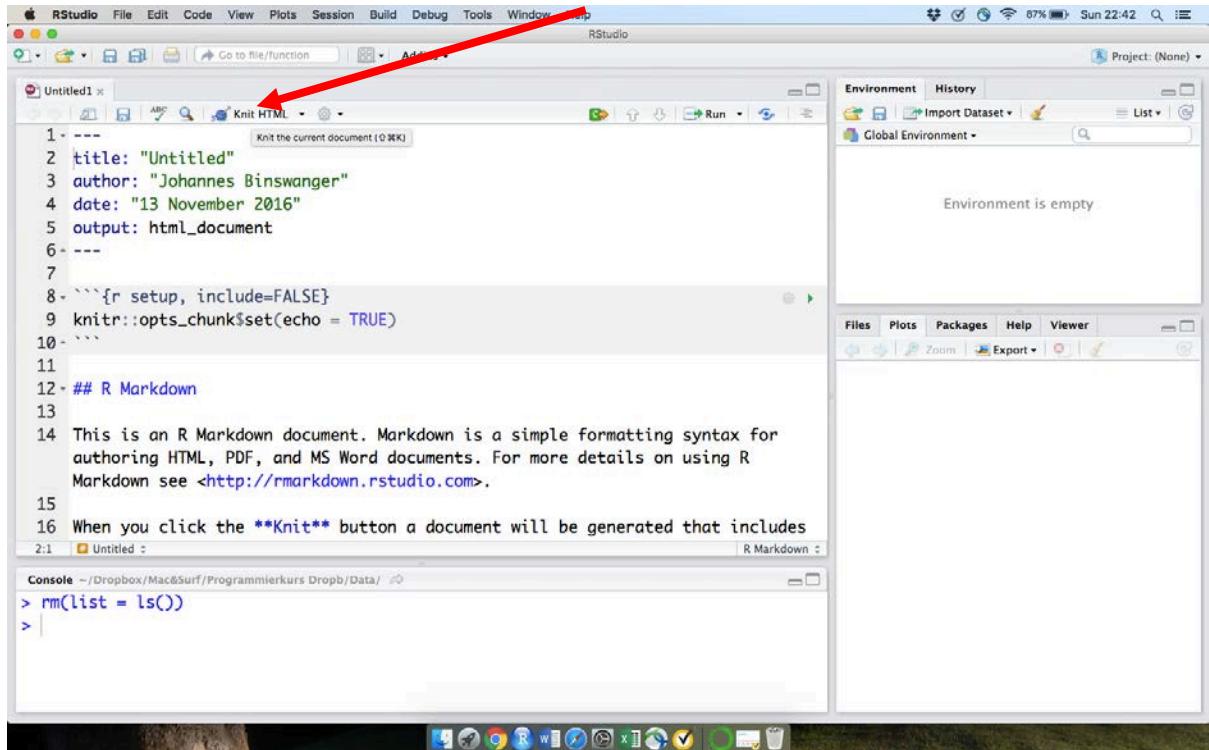


What you get is then the following sample document.

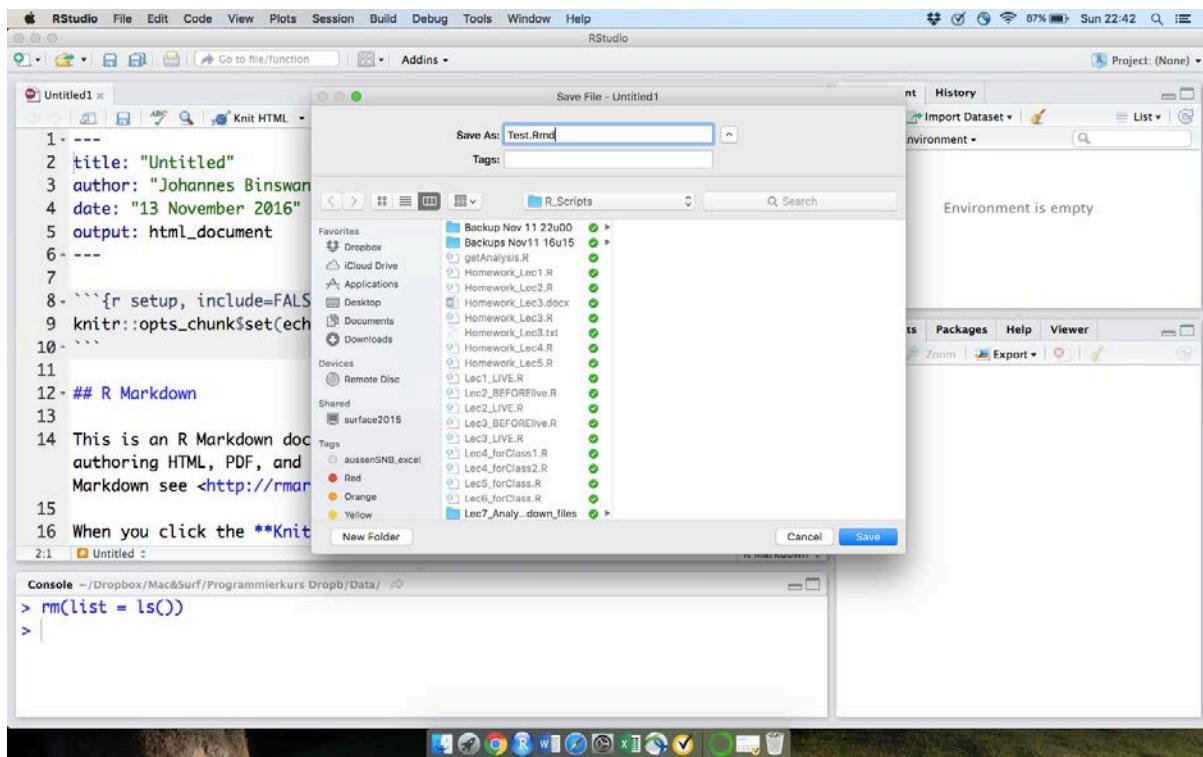


Choose Knit HMTL

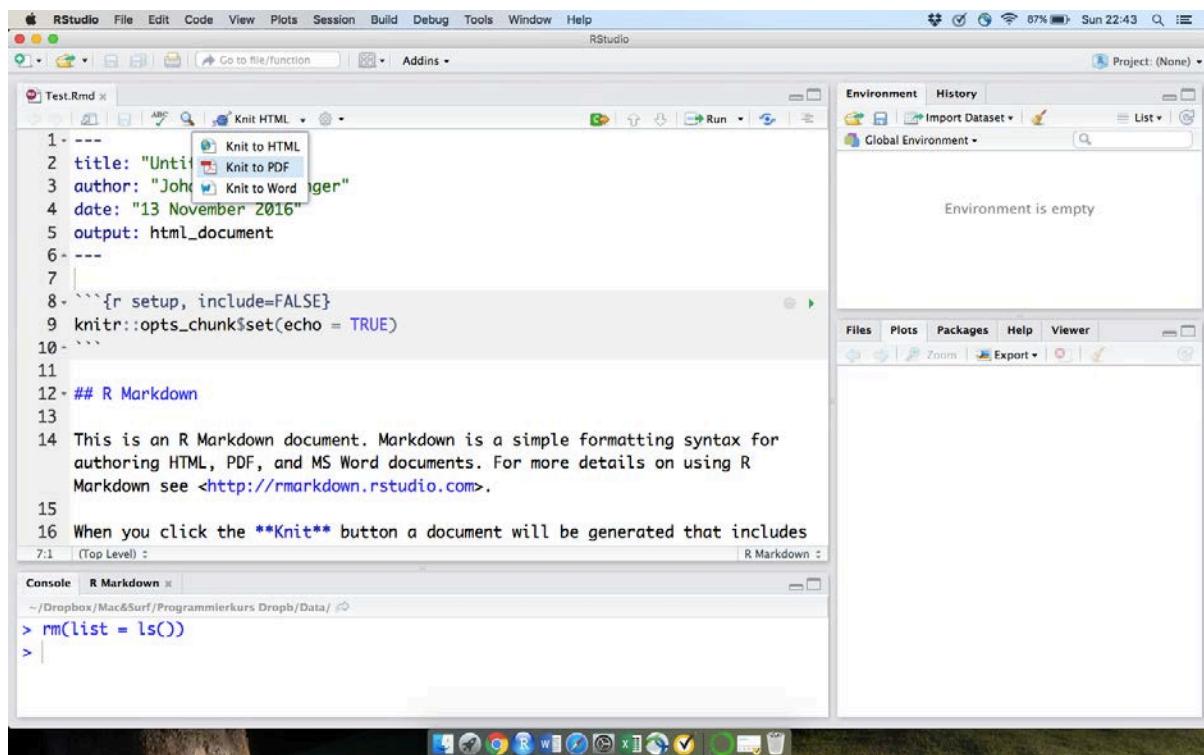
IMPORTANT: If there is any dot (".") in the date line (e.g. because your date appears in German in the form of "13. November 2016", make sure to remove the dot! Otherwise, you will get a compilation error.



You are asked to save your document. Choose a name such as "Test". It is very important that you provide the extension .Rmd! Then save and enjoy the output.



Now we want to compile to PDF, instead of HTML. Choose “Knit to PDF” from the menu.



I expect that for some, if not most, of you this works. If it does not work, you have to go on with the below steps and install Latex. If you feel you have a flair for programming and consider using a very powerful open-source text editing program that is widely used among scientists, then you should install Latex anyway!

So, to install Latex on a Mac, go to <https://tug.org/mactex/>. The people from RStudio strongly suggest using Safari as a browser, not Chrome. I haven't tried whether it makes any difference but used Safari.

The tug.org page looks like this. Go to MacTeX Download (which will install Latex on your system).

The MacTeX-2016 Distribution
[for Mac OS 10.5 through 10.12 --- Intel and PowerPC]

The current distribution is MacTeX-2016
This distribution requires Mac OS 10.5 Leopard or higher and runs on Intel or PowerPC processors.

To download, click [MacTeX Download](#).

To download the smaller BasicTeX, click [Smaller Download](#).

For Information on MacTeX and Sierra, click [here](#).
For Information on MacTeX and El Capitan, click [here](#).

For suggestions on keeping TeX up to date, go to [Update Schedule](#).
If you do not have root access, see [Alternate Installation Procedures](#).

The link below leads to other optional download packages:
[MacTeXtras: optional pieces](#)

FOR HELP AND INFORMATION ON WHAT IS INSTALLED
PLEASE CHECK THE LINKS IN THIS BOX

New Features in MacTeX-2016 and TeX Live 2016
About Shell Escape and Installing Fonts
[Click Here If You Are Running Mac OS 10.3 or 10.4]

Just what is TeX?
Downloading Issues
About MacTeX
The MacTeX Installer
What's in the MacTeX package
TeX Live Utility

MacTeXtras: optional pieces
Multiple TeX Distributions
Trying out TeX
Getting Help
Frequently Asked Questions
The Font Cache Bug in Mac OS X

Click on MacTeX.pkg

MacTeX

Download MacTeX 2016

To obtain the distribution, click the link below.

[MacTeX.pkg](#)

[approximately 2.8G - 09 October 2016]
The md5 sum is 515bd5e883dee3f17c7a98b6012706ed
Download with Safari strongly recommended
MacTeX is also available via the [torrent network](#).

After downloading, move the file MacTeX.pkg to the desktop or another convenient spot, and double click it to install. Follow the straightforward instructions. Installation on a recent Macintosh takes about six minutes.

MacTeX completely configures TeX, so after installation it is ready to use. Go to /Applications/Tex and read the short document "READ ME FIRST" to get started. This document leads a new user through the complete process of writing and typesetting a short LaTeX document. The location /Applications/Tex also contains "What is installed", which lists all the components of MacTeX and their installation locations.

MacTeX installs TeX Live, which contains TeX, LaTeX, AMS-TeX, and virtually every TeX-related style file and font. TeX Live is maintained by TeX User Groups across the world. TeX Live is compiled from the same sources for all platforms: Macintosh, Windows, Linux, Unix.

MacTeX also installs Ghostscript, an open source version of Postscript, and it installs the GUI programs TeXShop, LaTeXT, TeX Live Utility, BibDesk, and Excalibur.

At the end of installation, the installer will report "Success." But sometimes, the installer puts up a dialog saying "Verifying..." and then the install hangs. This hasn't occurred to the developers of MacTeX, but users have written us about it. In all cases known to us, rebooting the Macintosh fixes this problem. After the reboot, install again.

If other problems are reported during installation, skip to the section "Installation Errors" below.

Updating from an Earlier MacTeX Installation

If you previously installed MacTeX, you may already have your own favorite front ends and GUI programs. Perhaps, in addition, you have Ghostscript from another source such

The download starts... It takes plus/minus 10 minutes. It may take (much) longer if your internet connection is slow.



Downloading MacTeX 2016

To obtain the distribution, click the link below.

MacTeX.pkg

[approximately 2.8G - 09 October 2016]
The md5 sum is 515bd5e883deec3f17c7a98b6012706ed
Download with Safari strongly recommended
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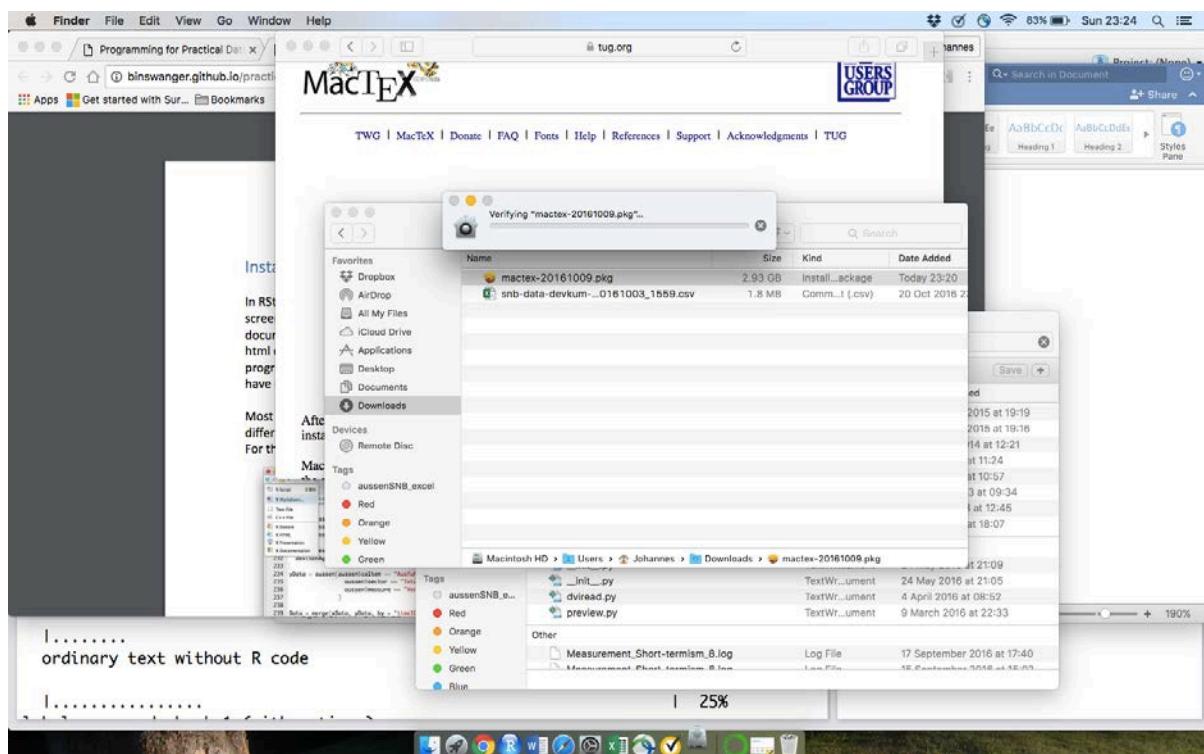
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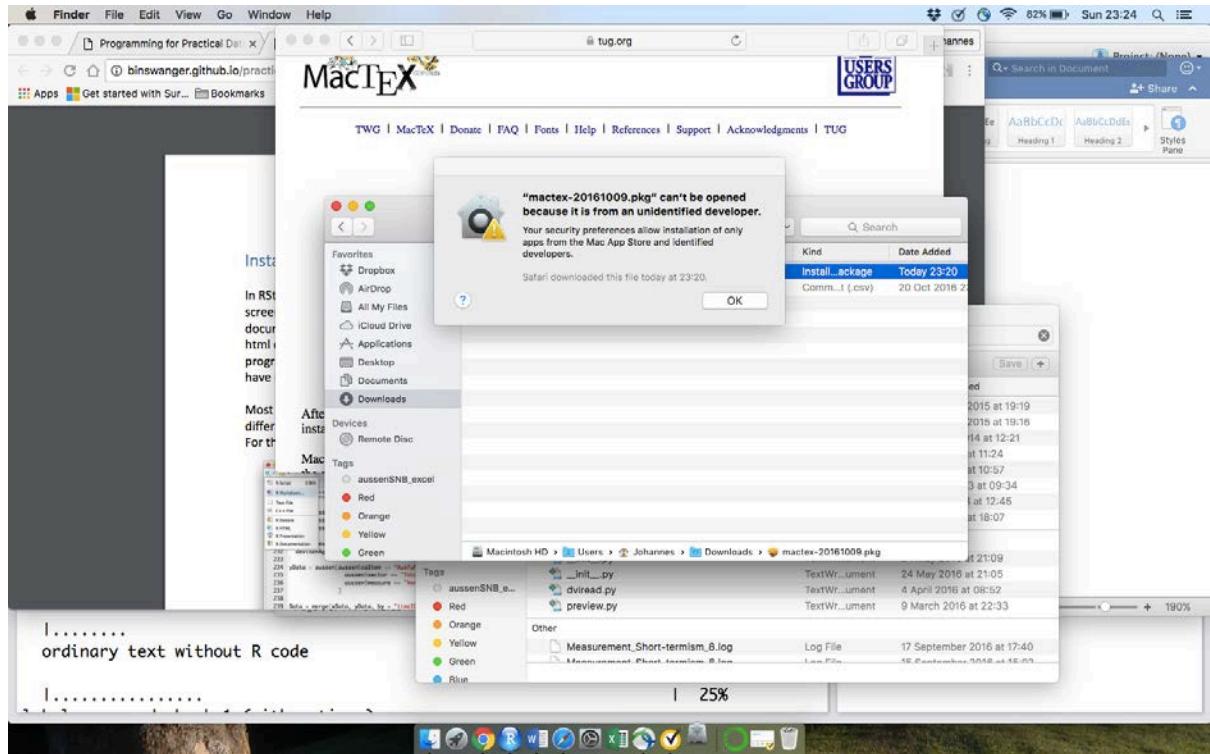
Updating from an Earlier MacTeX Installation

If you previously installed MacTeX, you may already have your own favorite front ends and GUI programs. Perhaps, in addition, you have Ghostscript from another source such

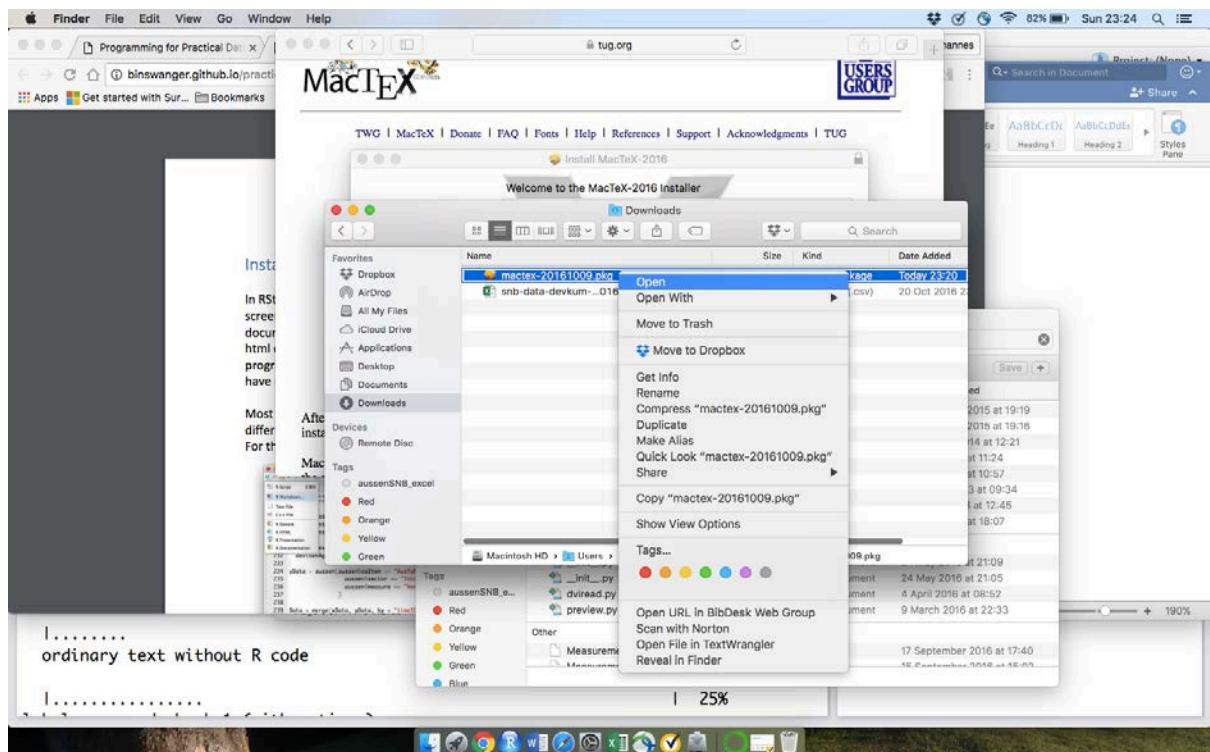
If you then just double click on the resulting item mactex-20161009.pkg, Apple may try to prevent you from doing harm to your machine....



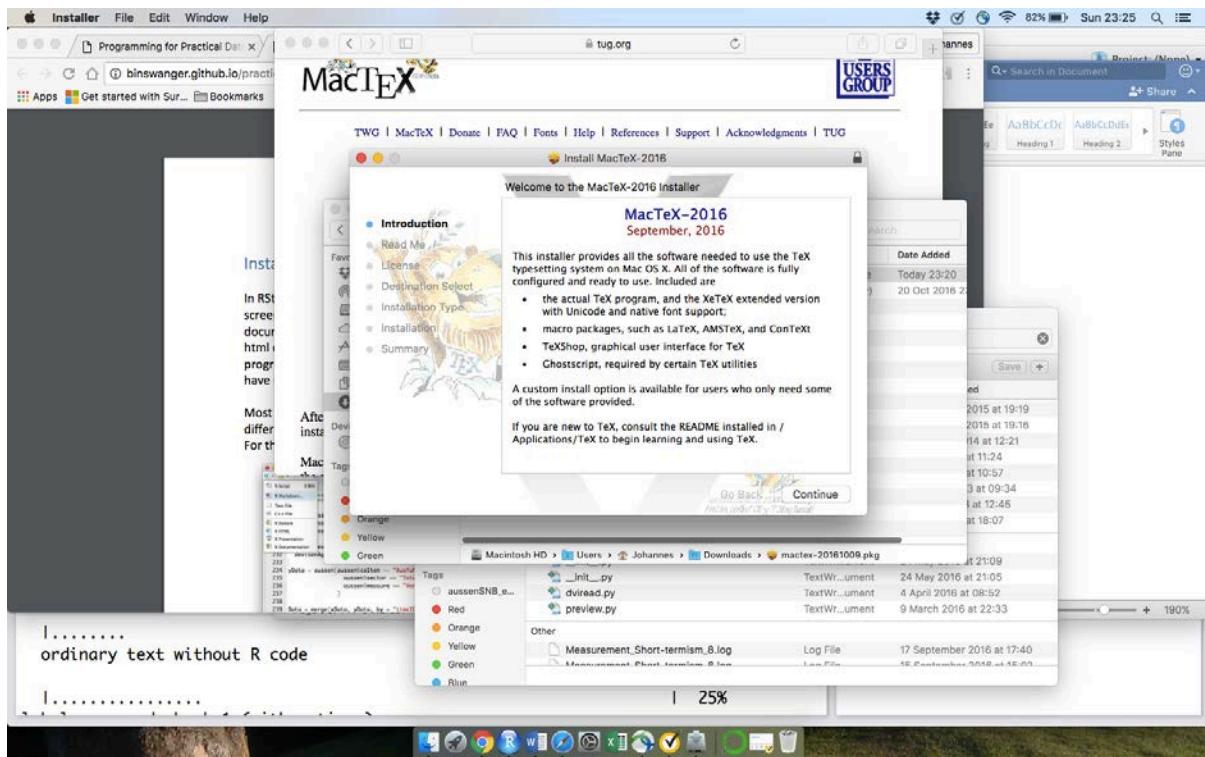
Apples paternalistic attitude...



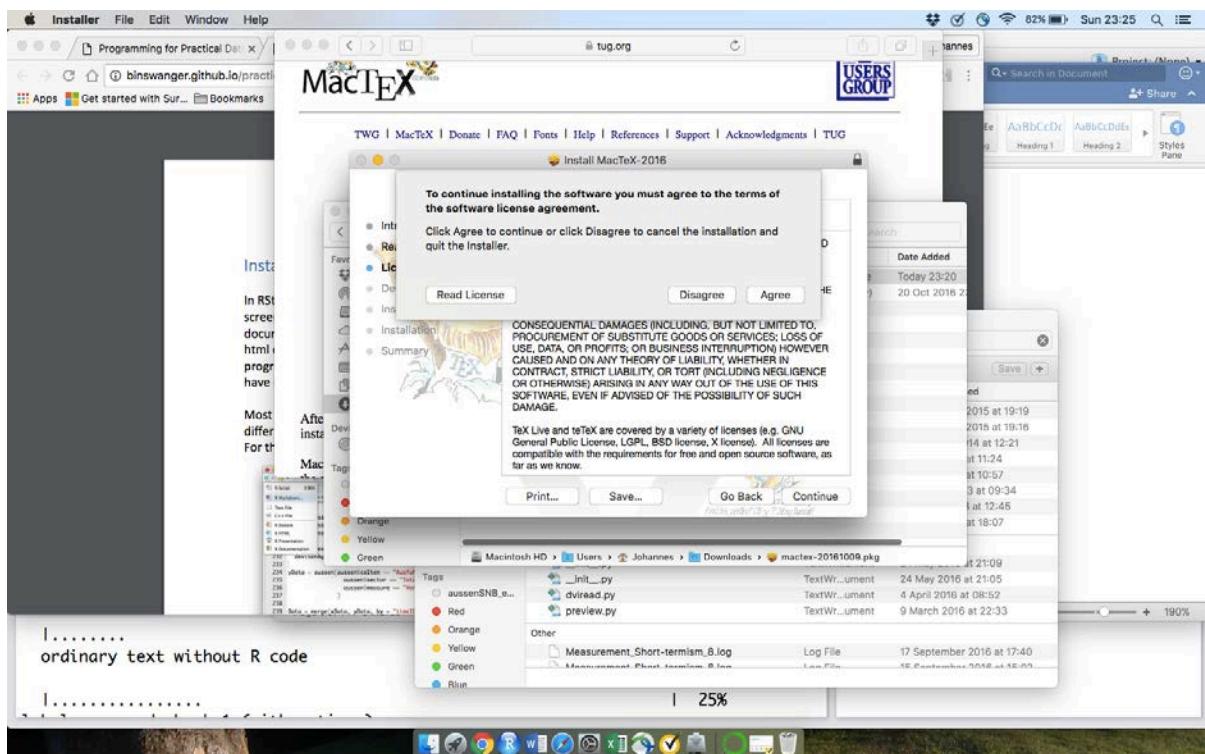
However, you are a grown-up and know how to work around it. Just right-click on the item and choose open.



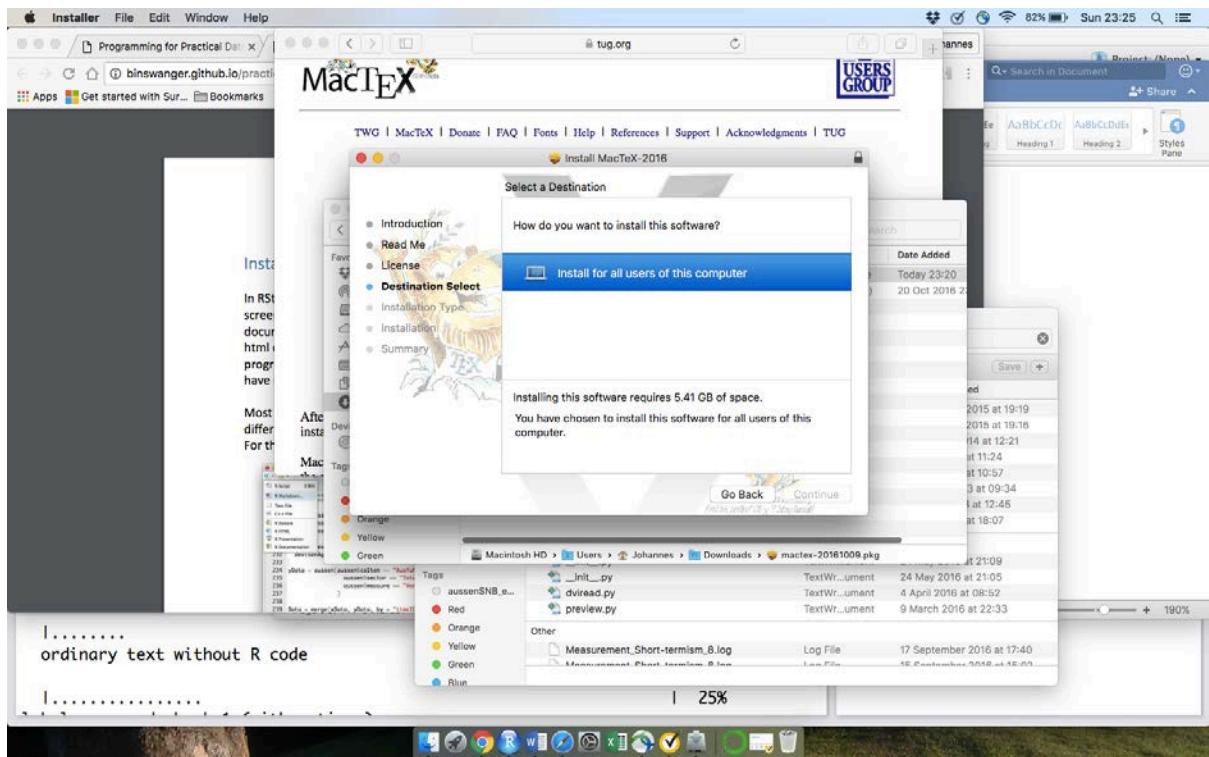
And the installation starts!



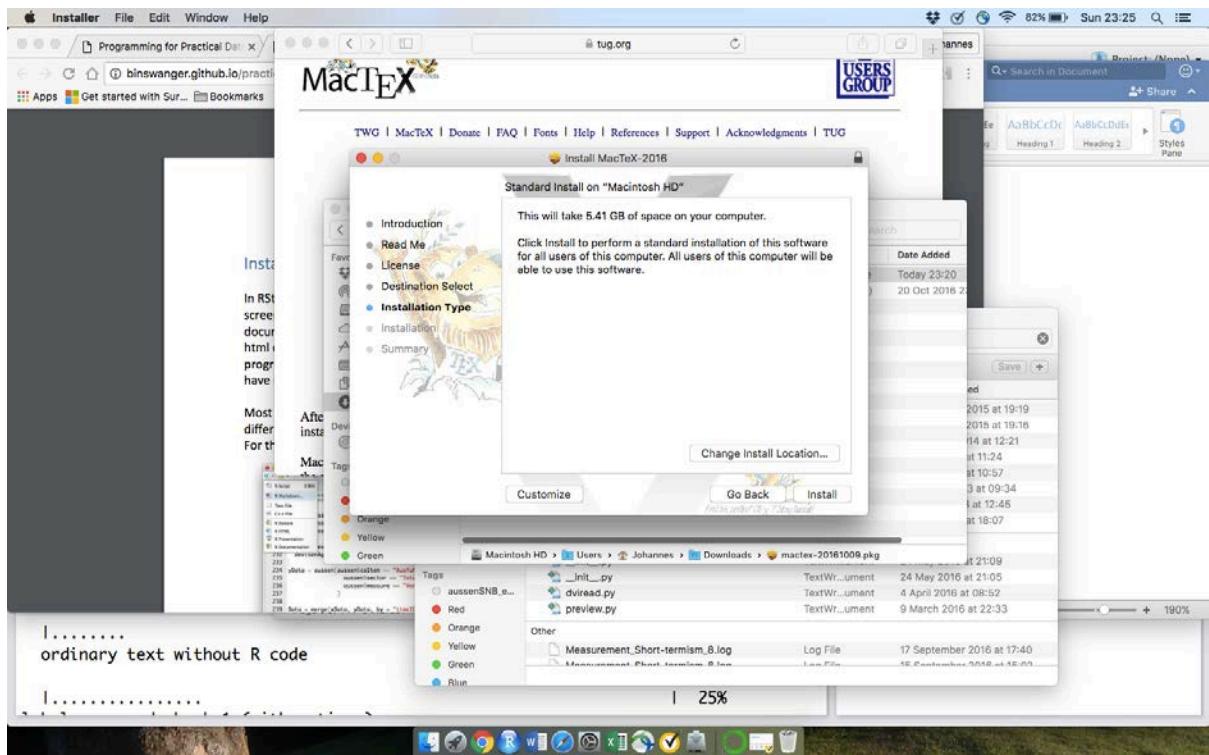
Agree...

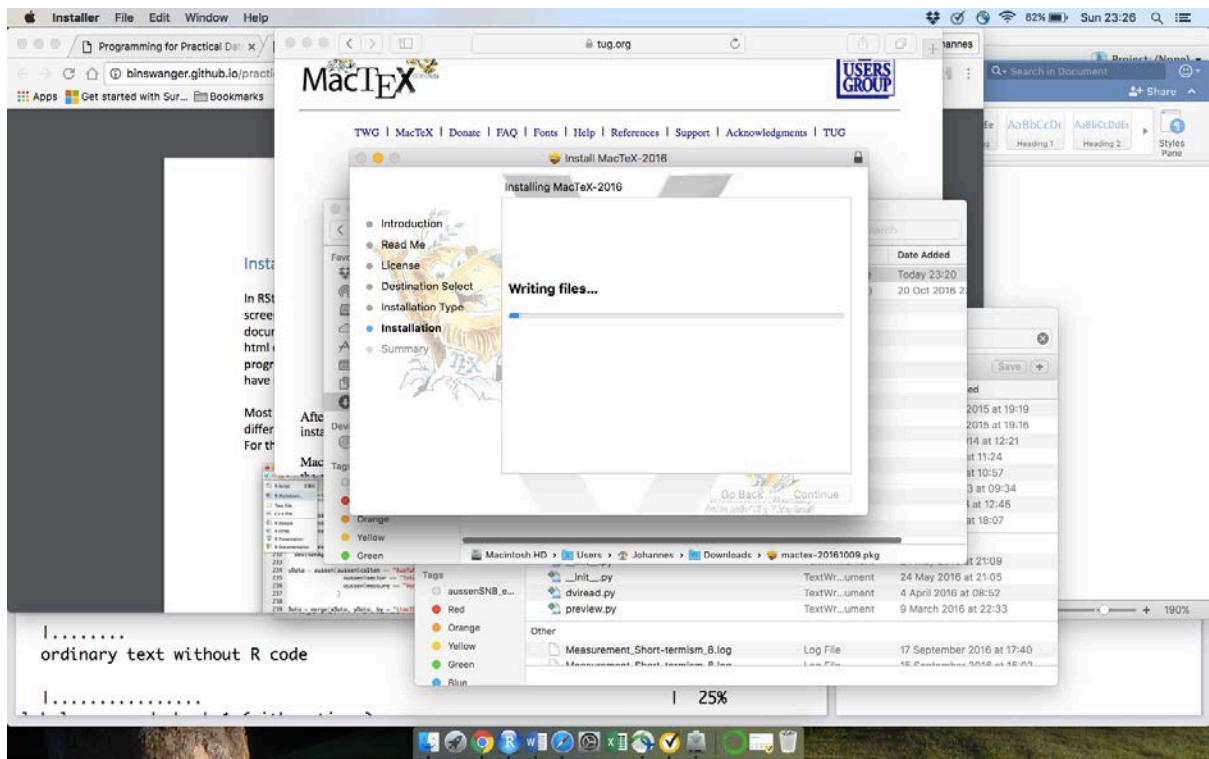


Choose some default settings as shown on the screenshots...

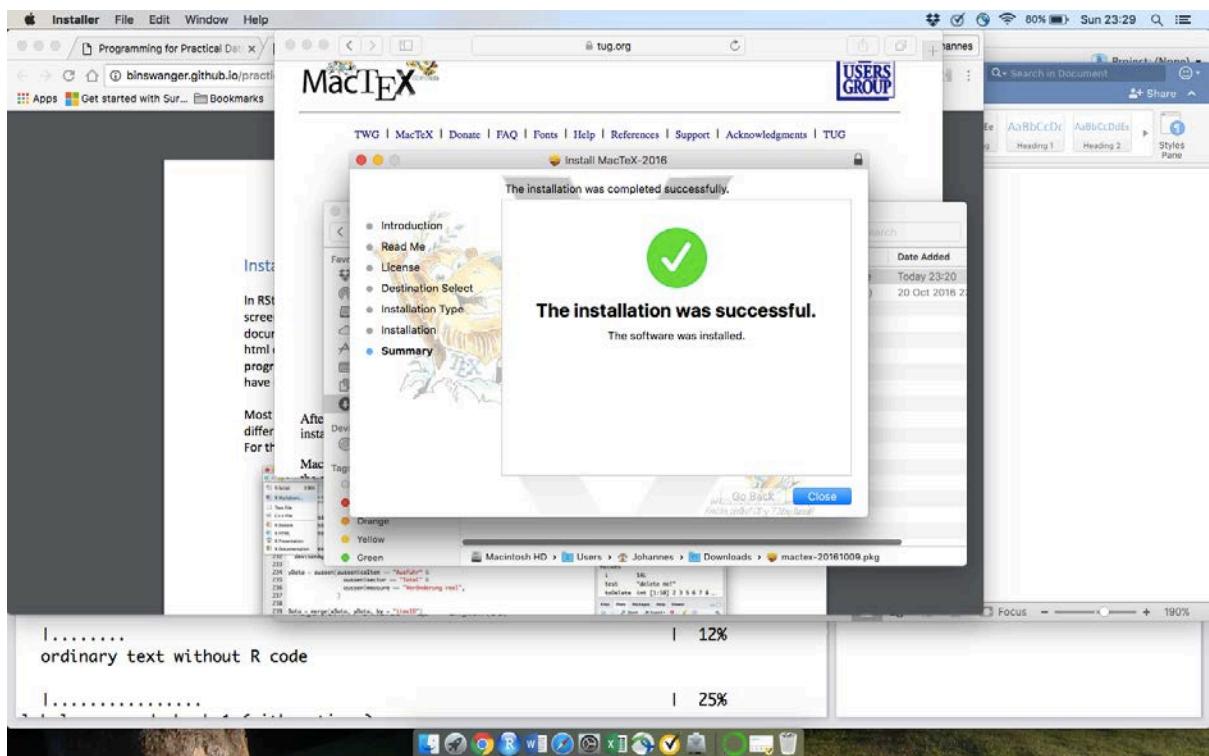


Accept the default...

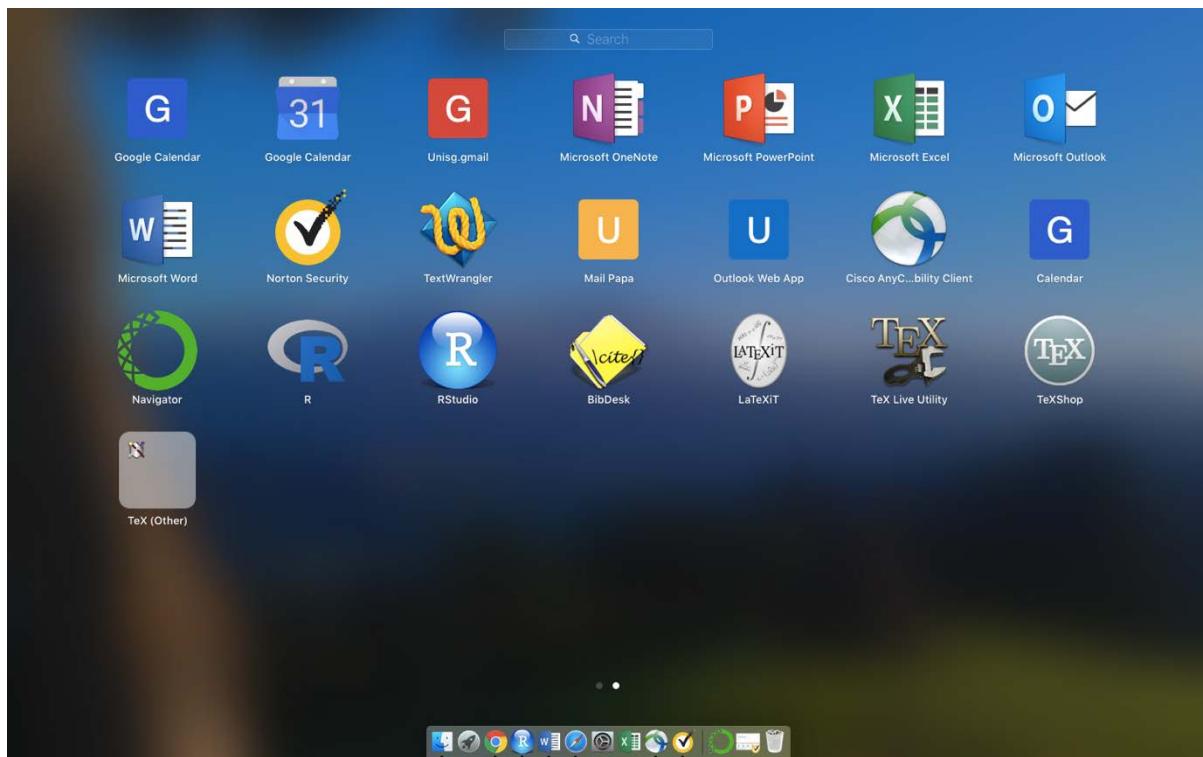




And, hopefully, you will get a success message.



If you go to the Launchpad, you can see some new items (it may look slightly different in your case).

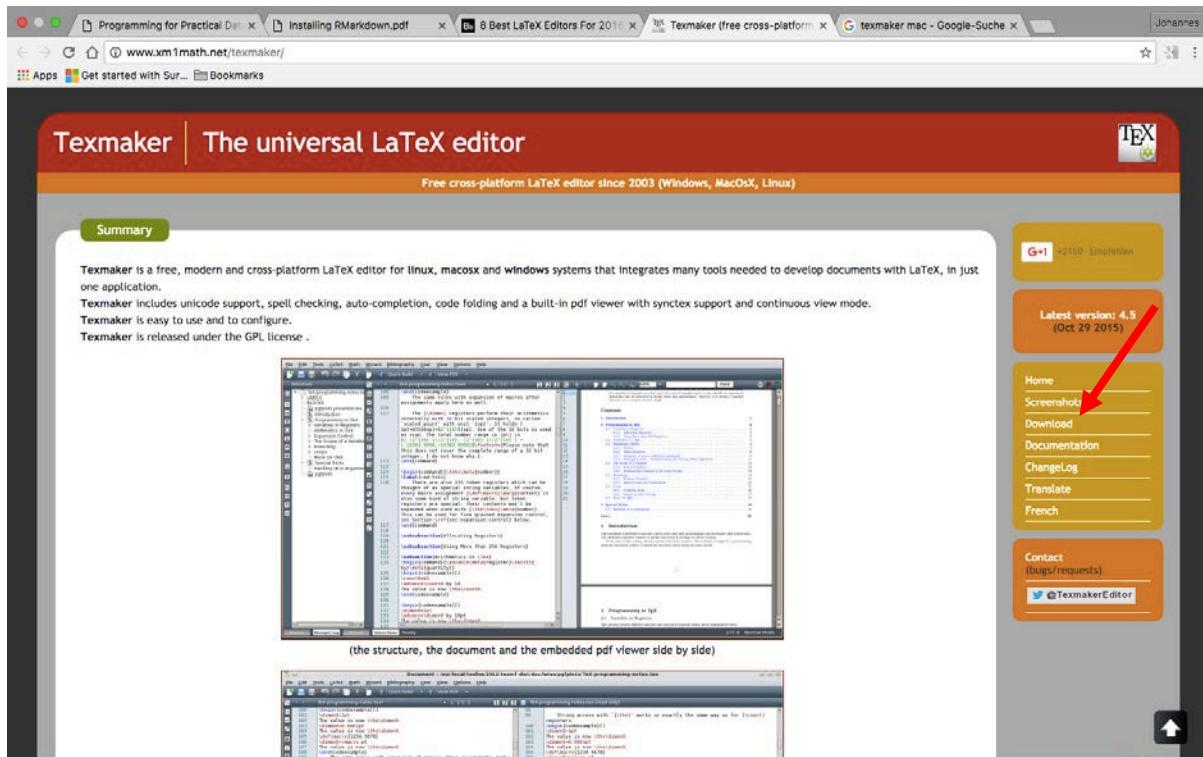


If you go now back to RStudio and your file “Test.Rmd” (or however you called it) and try “Knit to PDF”, it should work (if it did not already do so). If not, close RStudio and reopen it. If it still not works, restart your device.

Installing the Texmaker editor

If you are curious about using Latex, or are interested in editing Latex documents, it makes sense that you download an editor. An editor for using Latex is what RStudio is for using R! There are several good editors. One of them is Texmaker. The screenshots below show you how you can download and install Texmaker, in case you are interested (it is not mandatory for this course).

To install Texmaker, go to its website as shown below, and go to Download.



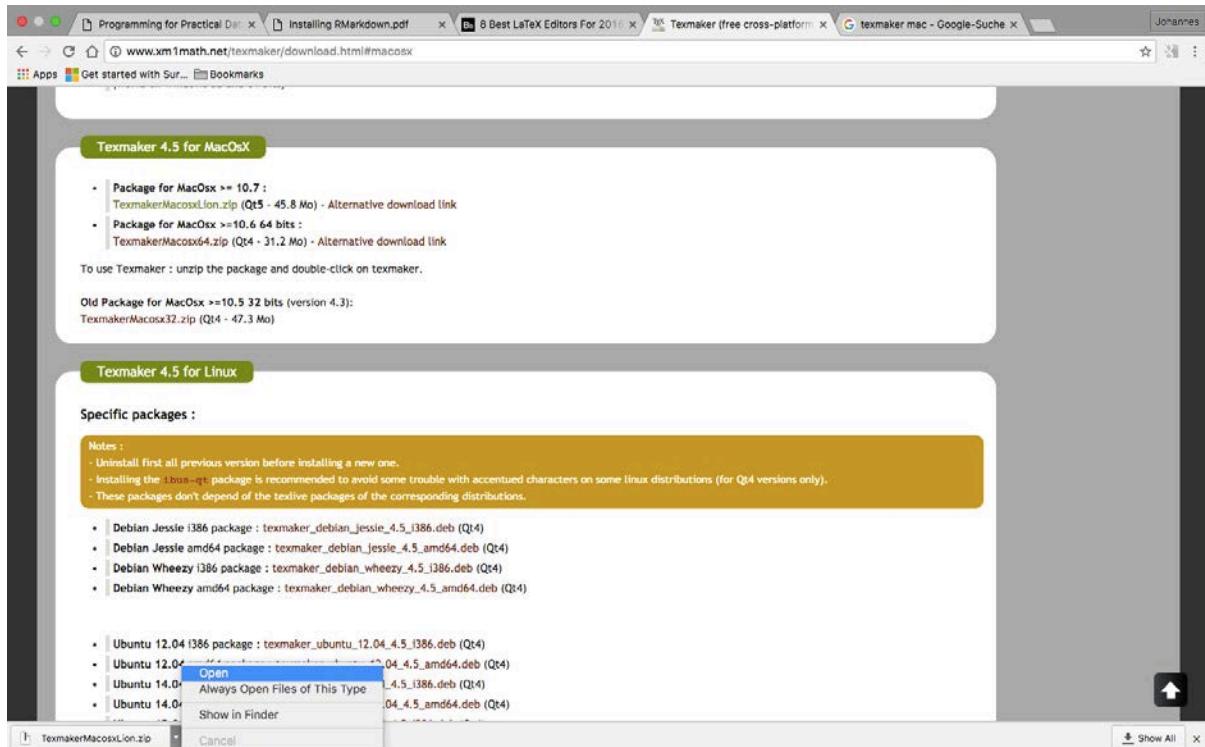
Then choose Texmaker for MacOsX

The screenshot shows the Texmaker download page. At the top, there's a note about SourceForge abandonment. Below it, a list of download links for Windows, MacOsX, Linux, OS/2, and source files. A note says "Note : a LaTeX distribution must be installed on the system to use Texmaker." To the right, there's a sidebar with links to Home, Screenshots, Download, Documentation, ChangeLog, Translate, French, and Contact. The main content area has a heading "Texmaker 4.5 for Windows" with two download options: an executable file for windows (xp, vista, seven, 8, 10) and a portable version.

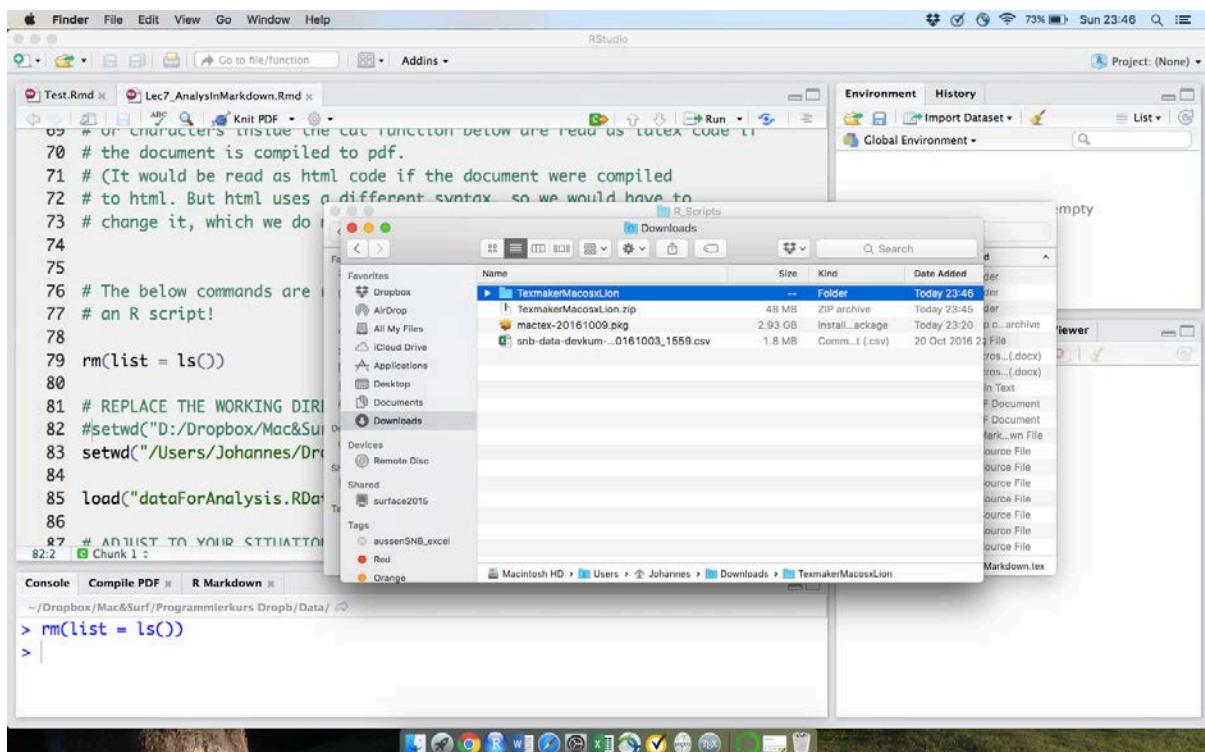
Check what system you have. My version of MacOsx is >=10.7. Click on the `.zip` link there.

The screenshot shows the Texmaker download page for MacOsX. It lists two package options: "Package for MacOsx >= 10.7" (texmakerMacosx10.7.zip) and "Package for MacOsx >= 10.6 64 bits" (texmakerMacosx64.zip). Below this, there's a note about unzipping and double-clicking the package. Further down, it shows an old package for MacOsx (texmakerMacosx32.zip) and a section for Texmaker 4.5 for Linux with specific packages for various distributions like Debian Jessie, Ubuntu, and others.

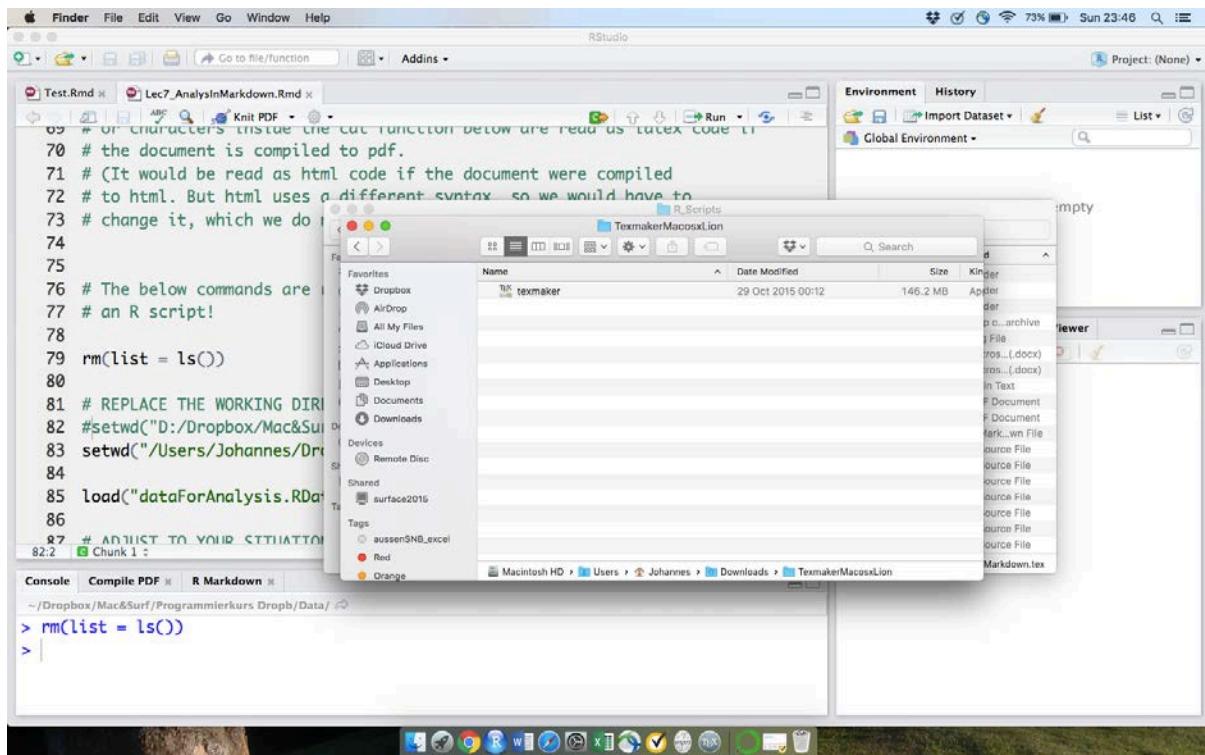
After the zip file is downloaded, open it.



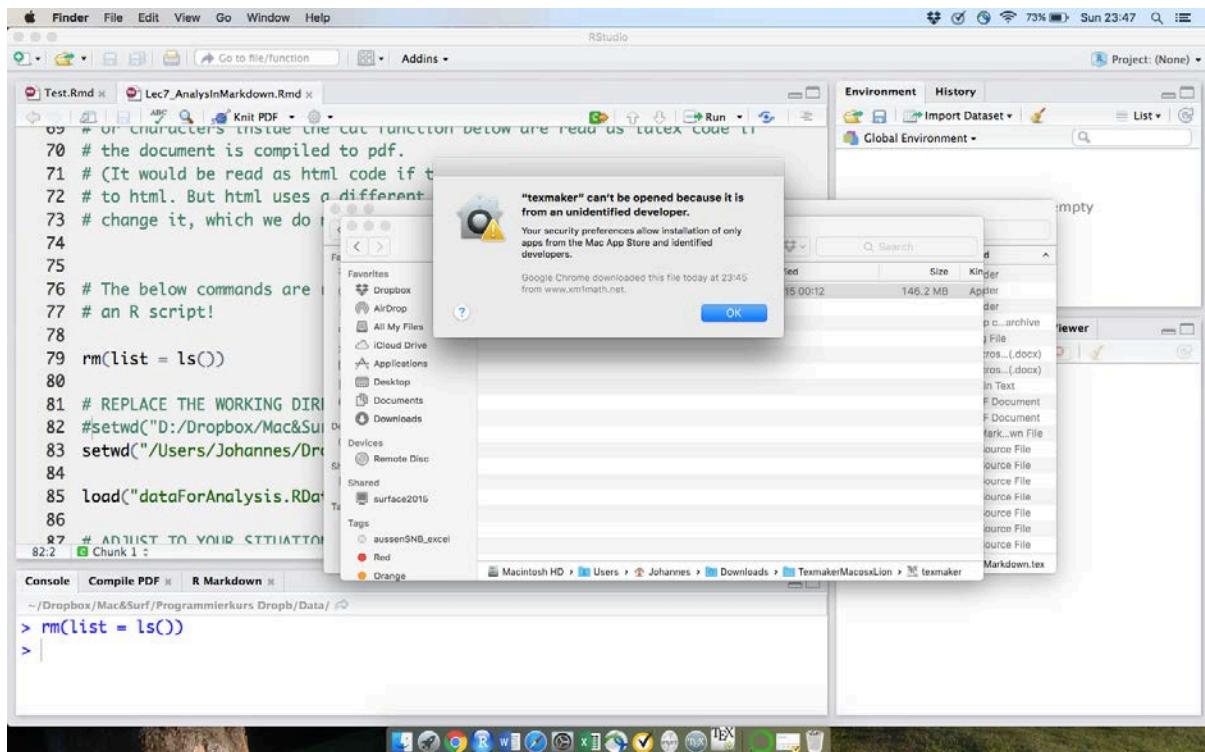
This extracts a folder called TexmakerMacosxLion. Click on that one.



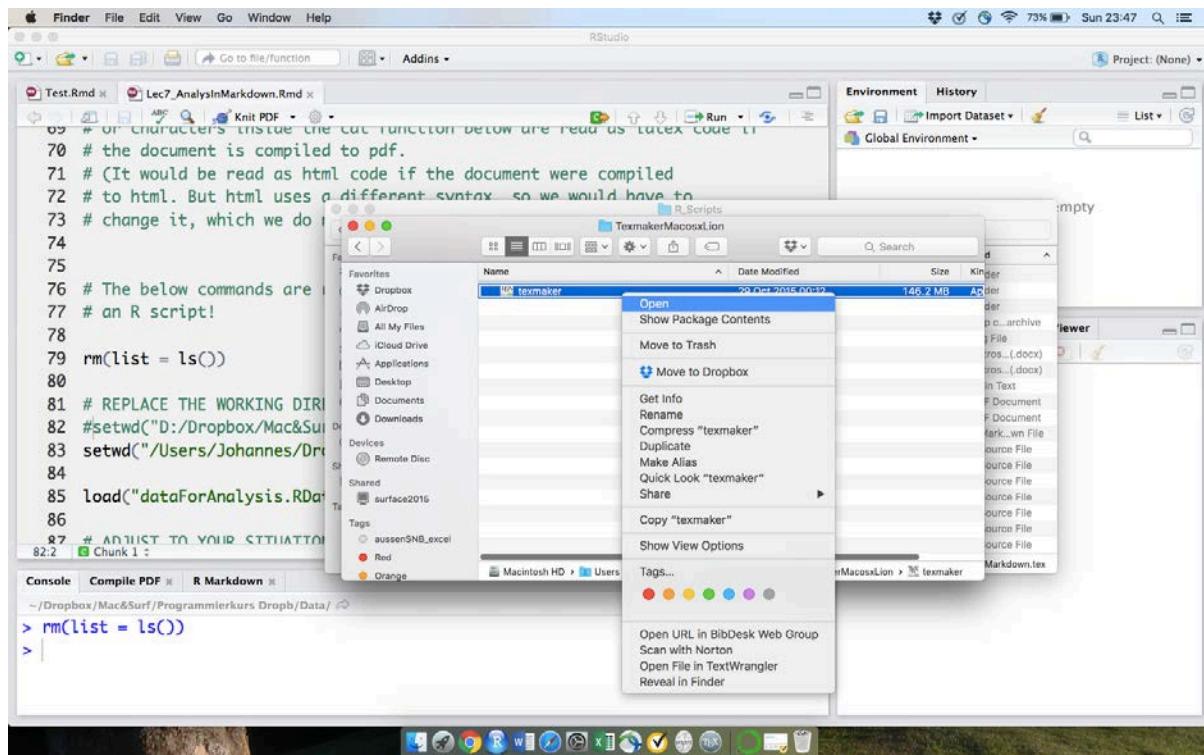
The folder contains an installation file called texmaker.



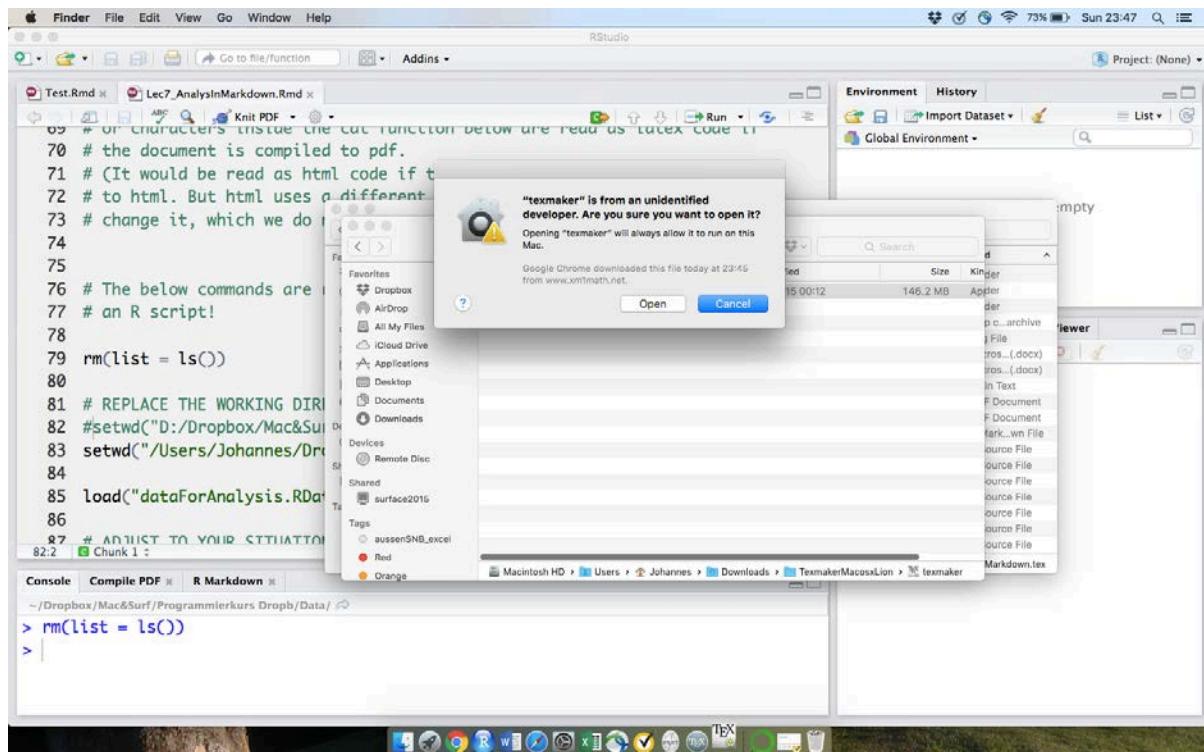
If you double-click it, Apple will block you.



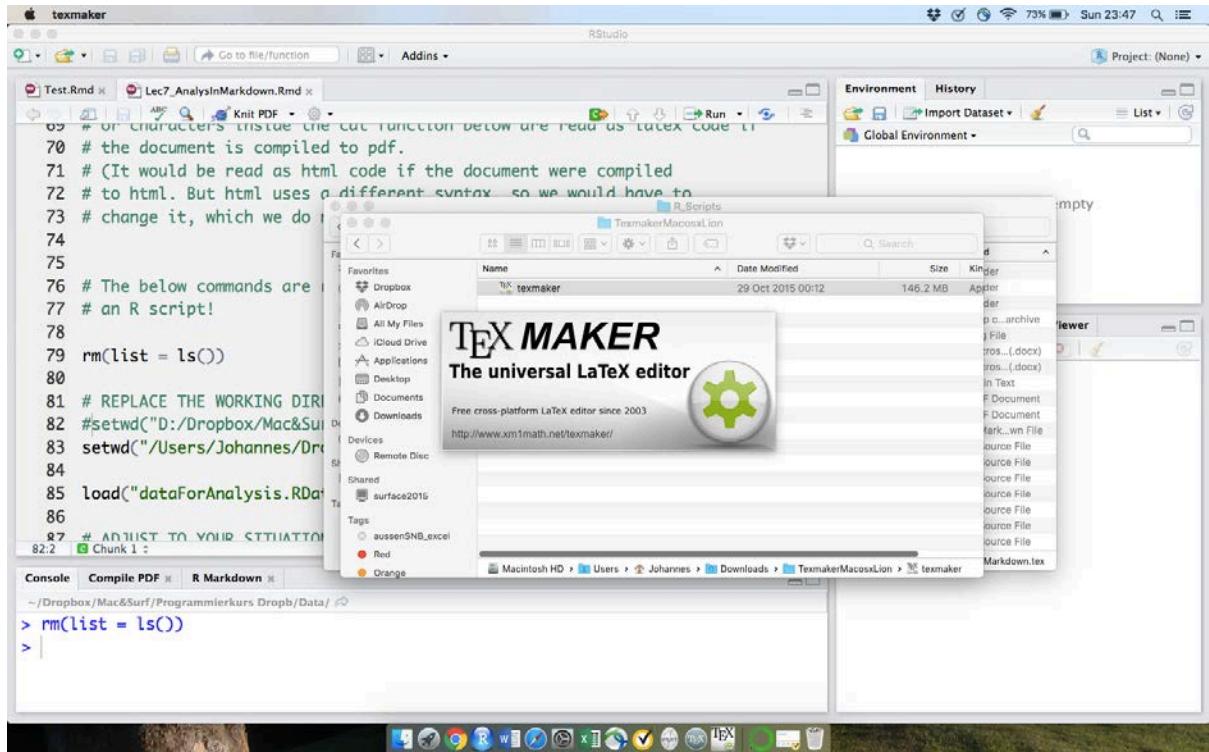
But since you know what you are doing, just right-click on it and choose Open.



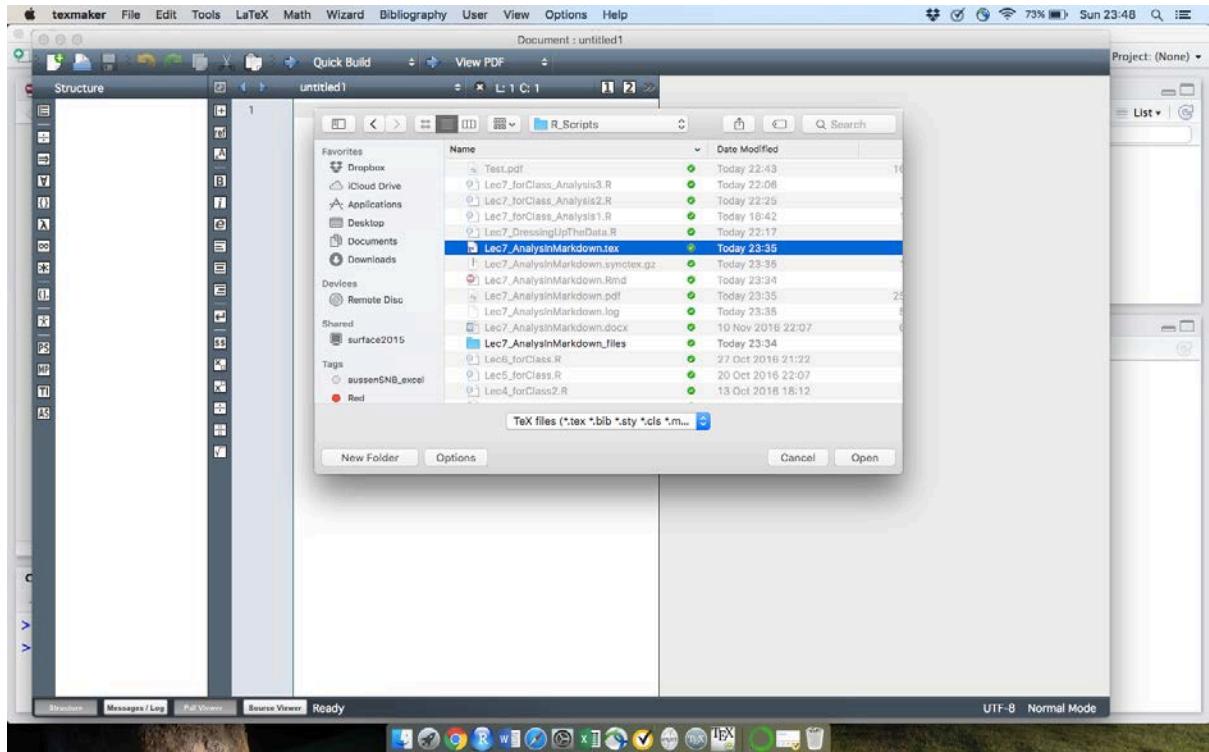
Conform Open and don't worry...



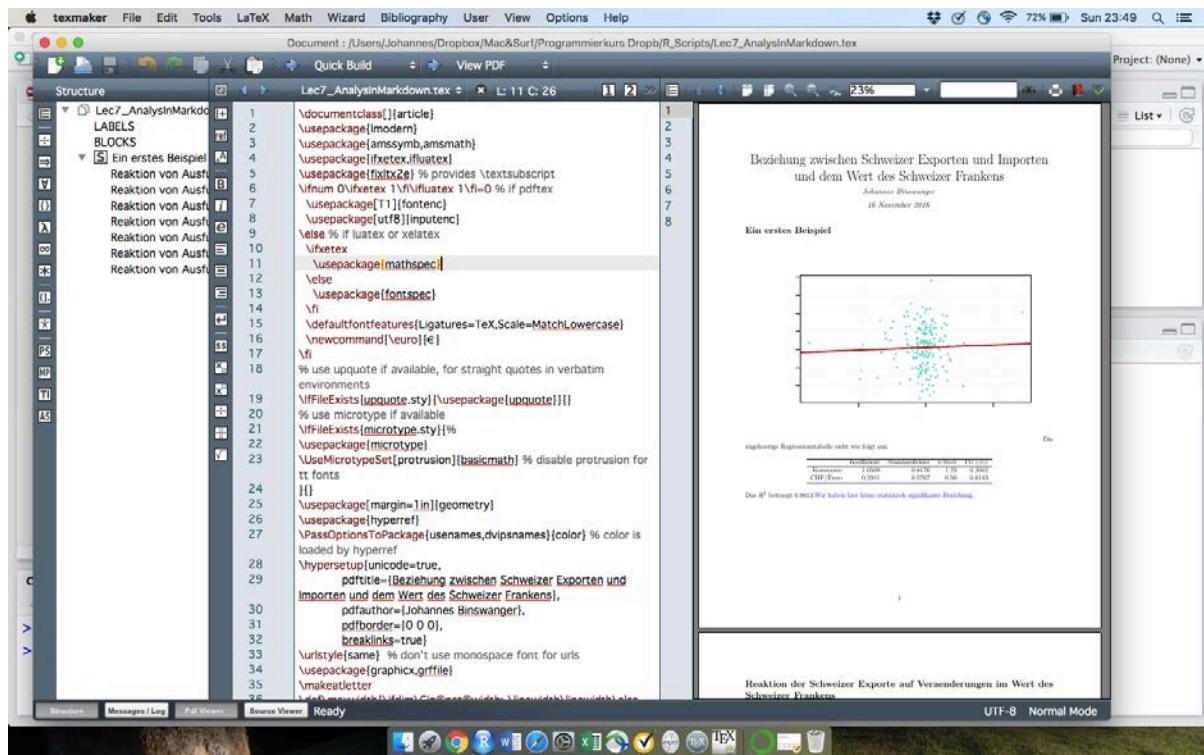
Now, Texmaker starts.



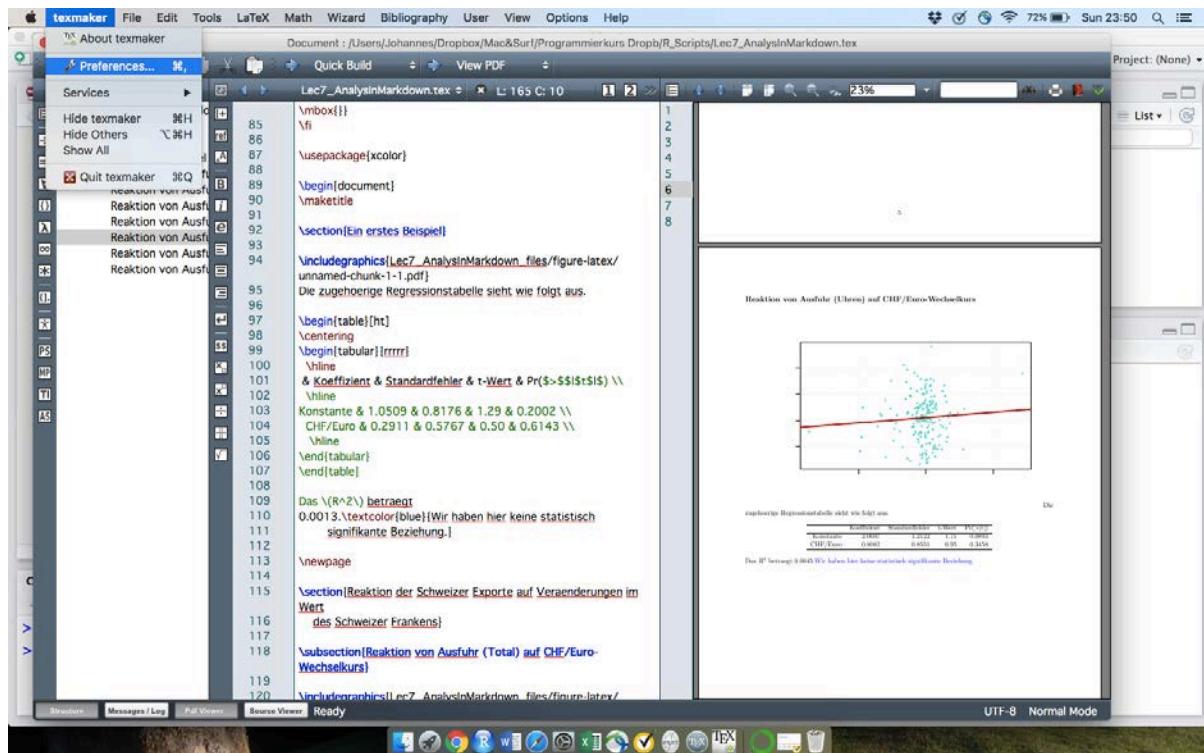
You can now open a texdocument. If you do not have any yet, wait until the lecture.



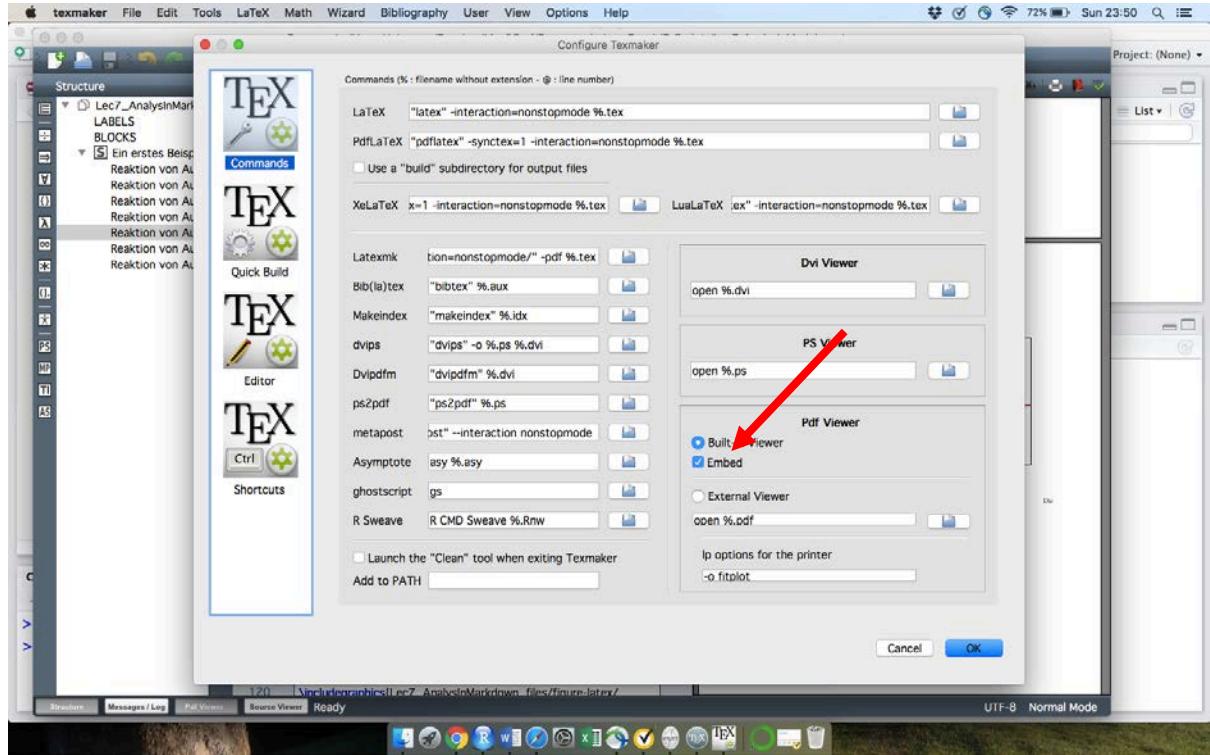
This is how the file that we will produce with RMarkdown looks when opened in Texmaker.



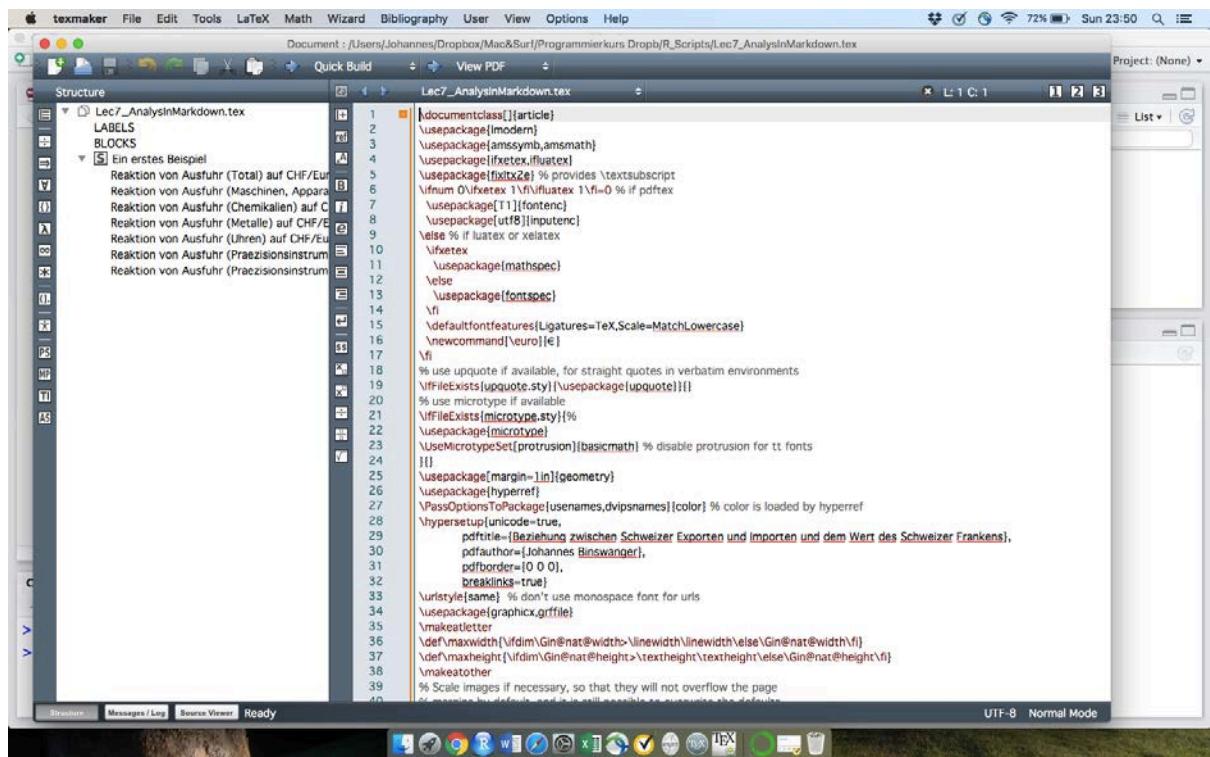
In the menu “texmaker” under Preferences you can customize Texmaker.



Personally, I like to uncheck the Embed option under “Commands”. But this is really just a personal preference.



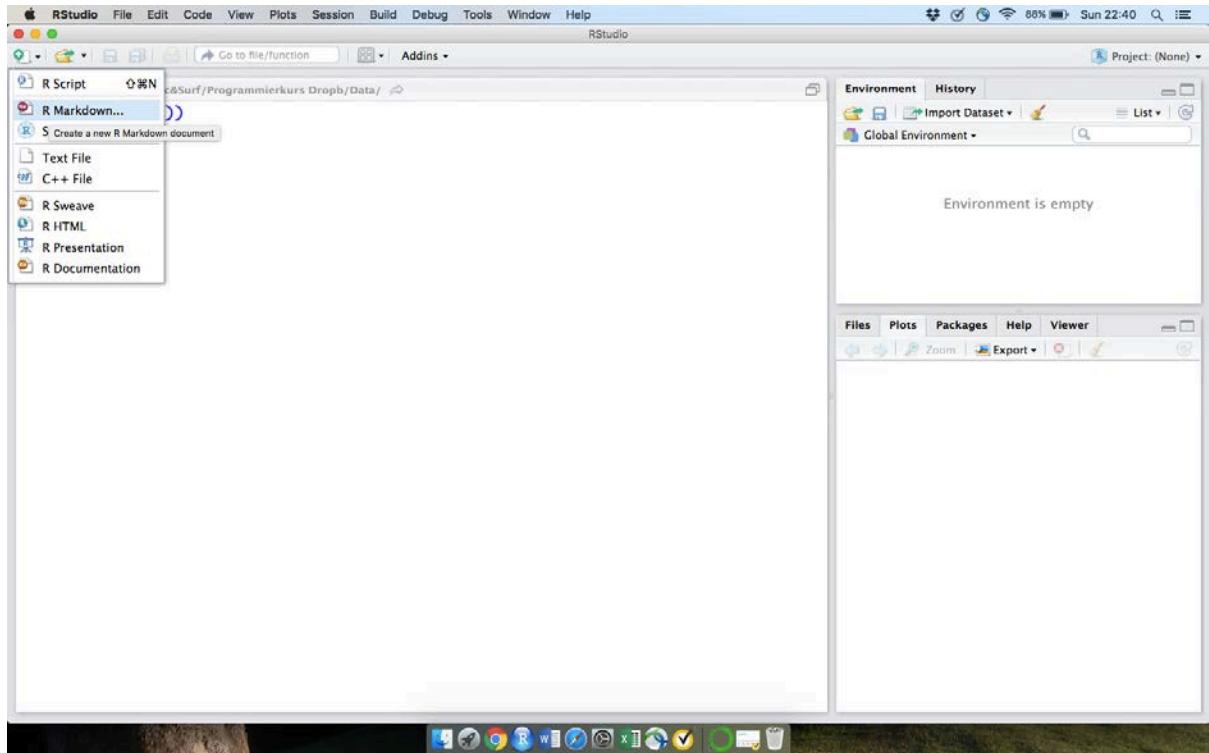
After unchecking the embed option, you only see the editor, the pdf is separate. I find it easier to edit the text this way.



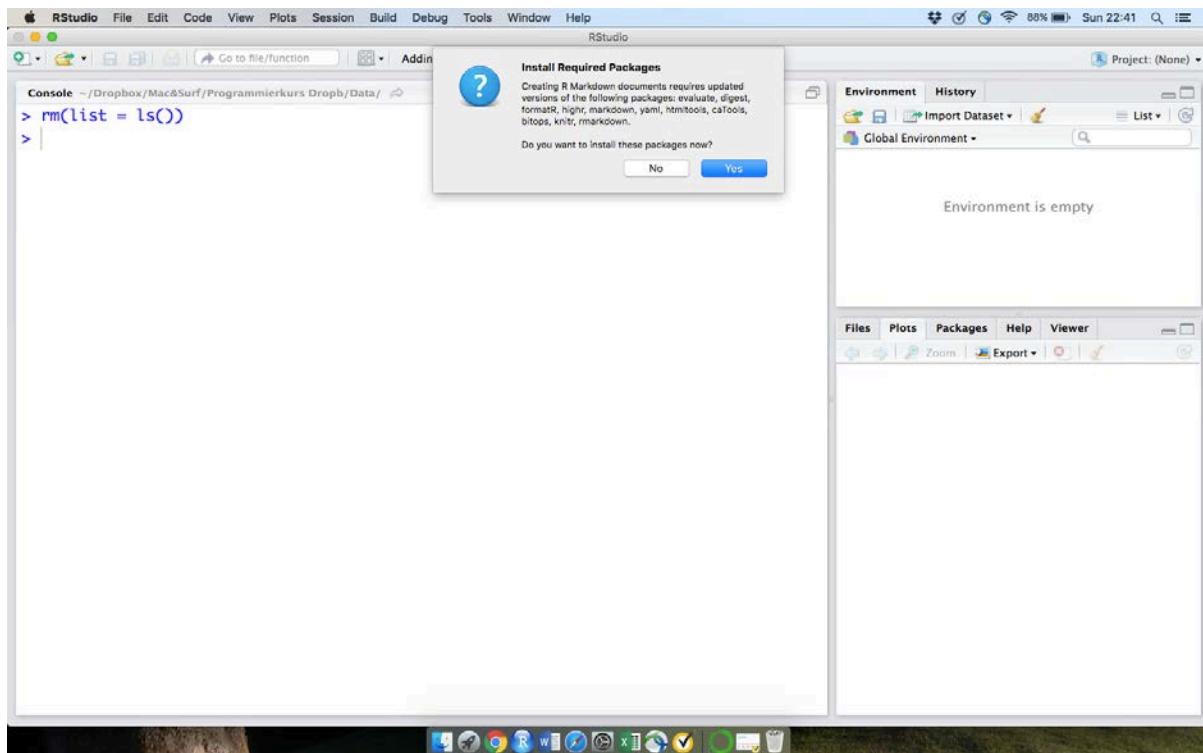
Getting ready for RMarkdown on Windows

Please note, the download and installation will take about 1 hour, and even more if your internet connection is a bit slow. So take your time!

The first steps are identical to the Mac case, so I reproduce some Mac images. Open RStudio and choose “R Markdown” from the little plus menu as shown below.



RStudio notices that this requires some new packages. Click Yes. If you are lucky, the packages get installed.



In my case of Windows 10, I saw numerous errors passing on the screen, and then nothing happened. And when I tried to repeat the process, I just got the same results. Luckily, I quickly got a workaround.

As a workaround, type `install.packages("rmarkdown")` into the **console**. Hopefully, this works.

The screenshot shows the RStudio interface with the console tab active. The console window displays the command `> install.packages("rmarkdown")` and its execution. The output shows the package being installed from the CRAN repository, with various dependencies like 'lazyeval', 'base64enc', 'jsonlite', and 'tibble' being checked and unpacked. The message "Environment is empty" is visible in the top right corner of the RStudio window.

```

> install.packages("rmarkdown")
Installing package into 'C:/users/jbinswan/Documents/R/win-library/3.3'
(as 'lib' is unspecified)
also installing the dependencies 'lazyeval', 'base64enc', 'jsonlite', 'tibble'

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/lazyeval_0.2.0.zip'
Content type 'application/zip' length 137806 bytes (134 KB)
downloaded 134 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/base64enc_0.1-3.zip'
Content type 'application/zip' length 38394 bytes (37 KB)
downloaded 37 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/jsonlite_1.1.zip'
Content type 'application/zip' length 1149855 bytes (1.1 MB)
downloaded 1.1 MB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/tibble_1.2.zip'
Content type 'application/zip' length 613669 bytes (599 KB)
downloaded 599 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/rmarkdown_1.1.zip'
Content type 'application/zip' length 2247047 bytes (2.1 MB)
downloaded 2.1 MB

package 'lazyeval' successfully unpacked and MD5 sums checked
package 'base64enc' successfully unpacked and MD5 sums checked
package 'jsonlite' successfully unpacked and MD5 sums checked
package 'tibble' successfully unpacked and MD5 sums checked
package 'rmarkdown' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
  C:/users/jbinswan/AppData/Local/Temp/RtmpI71VmC/downloaded_packages
>

```

You are asked for some input. On the left side, keep Document selected, and keep HTML. Choose whatever Title or Author you like.

The screenshot shows the RStudio interface with the console tab active. The console window displays the command `> install.packages("rmarkdown")` and its execution, identical to the previous screenshot. A 'New R Markdown' dialog box is overlaid on the console, prompting the user to enter a title ('Untitled') and author ('jbg'). The 'Default Output Format' section is set to 'HTML'. The rest of the RStudio interface, including the environment and viewer panes, is visible.

```

> install.packages("rmarkdown")
Installing package into 'C:/users/jbinswan/Documents/R/win-library/3.3'
(as 'lib' is unspecified)
also installing the dependencies 'lazyeval', 'base64enc', 'jsonlite', 'tibble'

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trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/jsonlite_1.1.zip'
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downloaded 1.1 MB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.3/tibble_1.2.zip'
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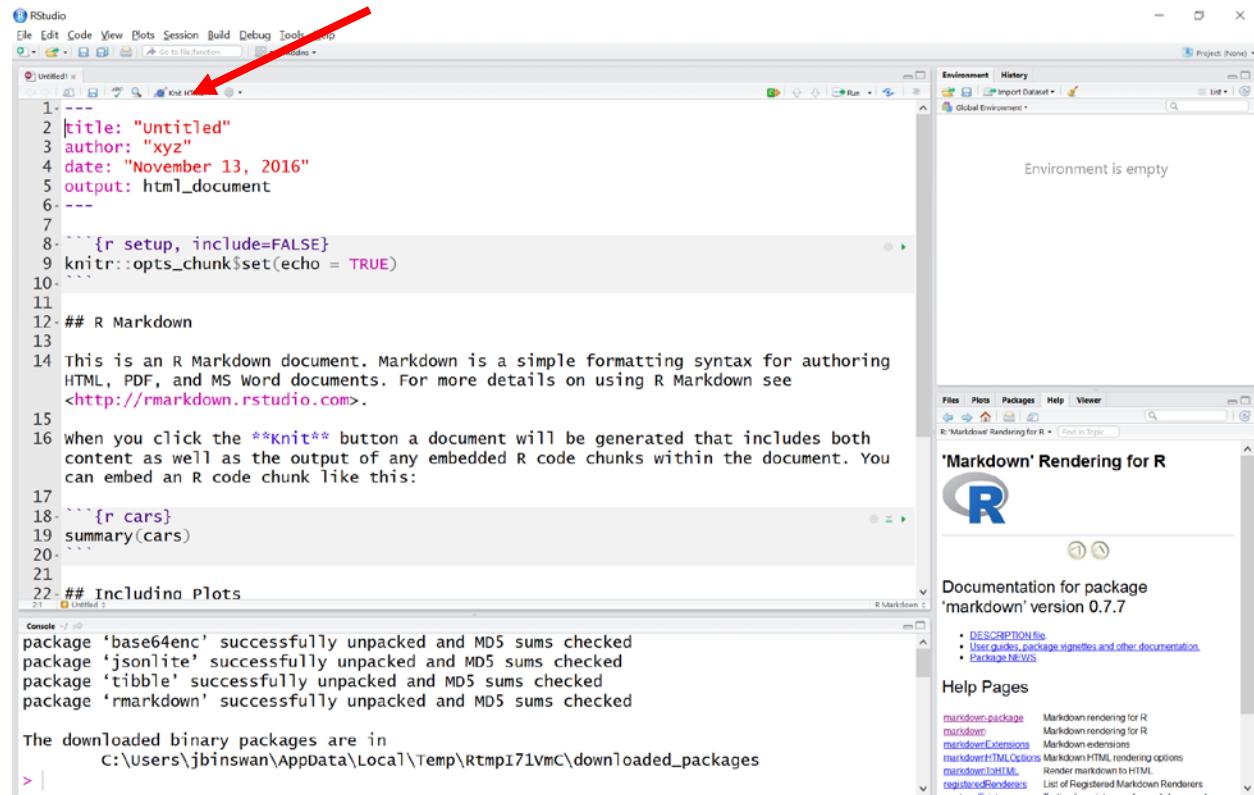
package 'lazyeval' successfully unpacked and MD5 sums checked
package 'base64enc' successfully unpacked and MD5 sums checked
package 'jsonlite' successfully unpacked and MD5 sums checked
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package 'rmarkdown' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
  C:/users/jbinswan/AppData/Local/Temp/RtmpI71VmC/downloaded_packages
>

```

The result is as follows. This is just a sample provided by RStudio. Click “Knit to HTML”.

IMPORTANT: If there is any dot (“.”) in the date line (e.g. because yours appears in German in the form of “13. November 2016”, make sure to remove that dot! Otherwise, you will get a compilation error.



The screenshot shows the RStudio interface with the following components:

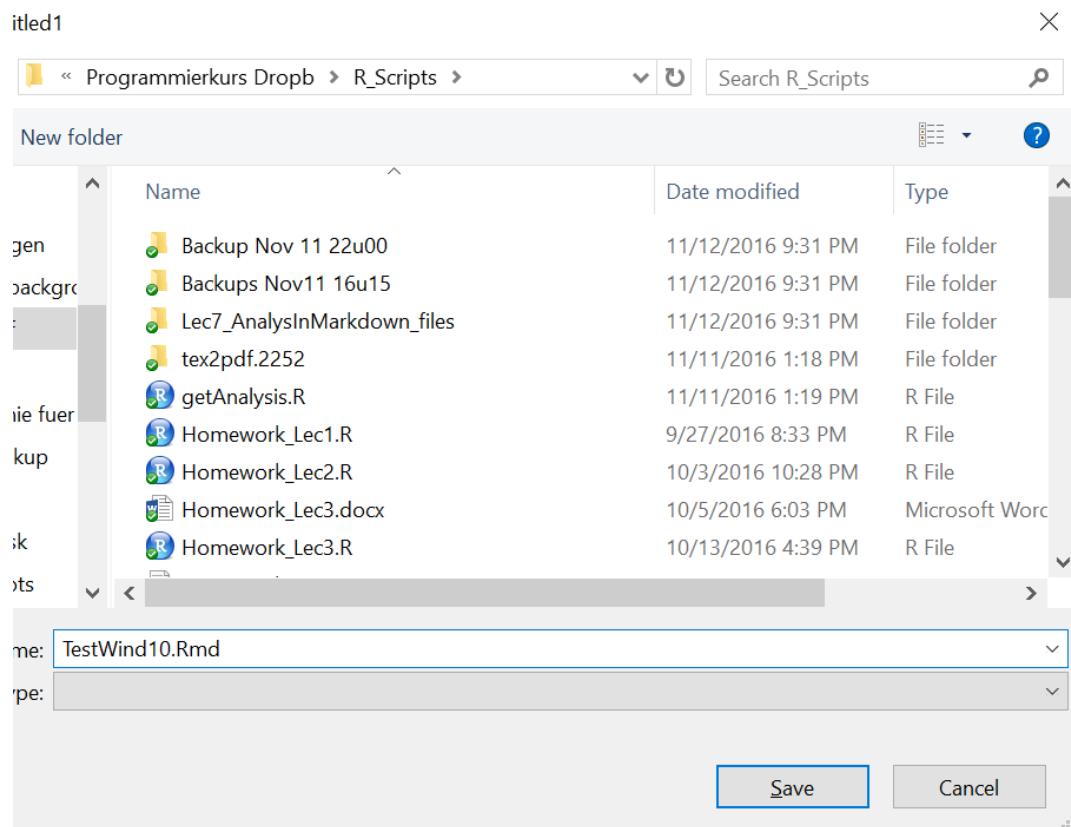
- Top Bar:** File, Edit, Code, View, Plots, Session, Build, Debug, Tools, Help.
- Toolbar:** Includes buttons for Save, Run, Knit, and others.
- Code Editor:** An untitled R Markdown file with the following content:

```
1 ---  
2 [title: "untitled"  
3 author: "xyz"  
4 date: "November 13, 2016"  
5 output: html_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 formatting syntax for authoring  
HTML, PDF, and MS Word documents. For more details on using R Markdown see  
http://rmarkdown.rstudio.com.  
15  
16 when you click the Knit button a document will be generated that includes both  
content as well as the output of any embedded R code chunks within the document. You  
can embed an R code chunk like this:  
17  
18 ```{r cars}  
19 summary(cars)  
20  
21  
22 ## Including Plots
```
- Console:** Shows package installation logs:

```
package 'base64enc' successfully unpacked and MD5 sums checked  
package 'jsonlite' successfully unpacked and MD5 sums checked  
package 'tibble' successfully unpacked and MD5 sums checked  
package 'rmarkdown' successfully unpacked and MD5 sums checked
```

The downloaded binary packages are in
C:\Users\jbinswan\AppData\Local\Temp\RtmpI71vmC\downloaded_packages
- Environment:** Shows "Environment is empty".
- Help Pages:** A sidebar with links to 'DESCRIPTION file', 'User guides, package vignettes and other documentation.', and 'Package NEWS'.
- Viewer:** Displays a preview of the rendered Markdown document titled 'Markdown' Rendering for R, showing the R logo and some basic text.

You are asked to save the above-shown file first. Choose whatever filename you like e.g. "Test". It is very important the file extension is .Rmd as shown below.

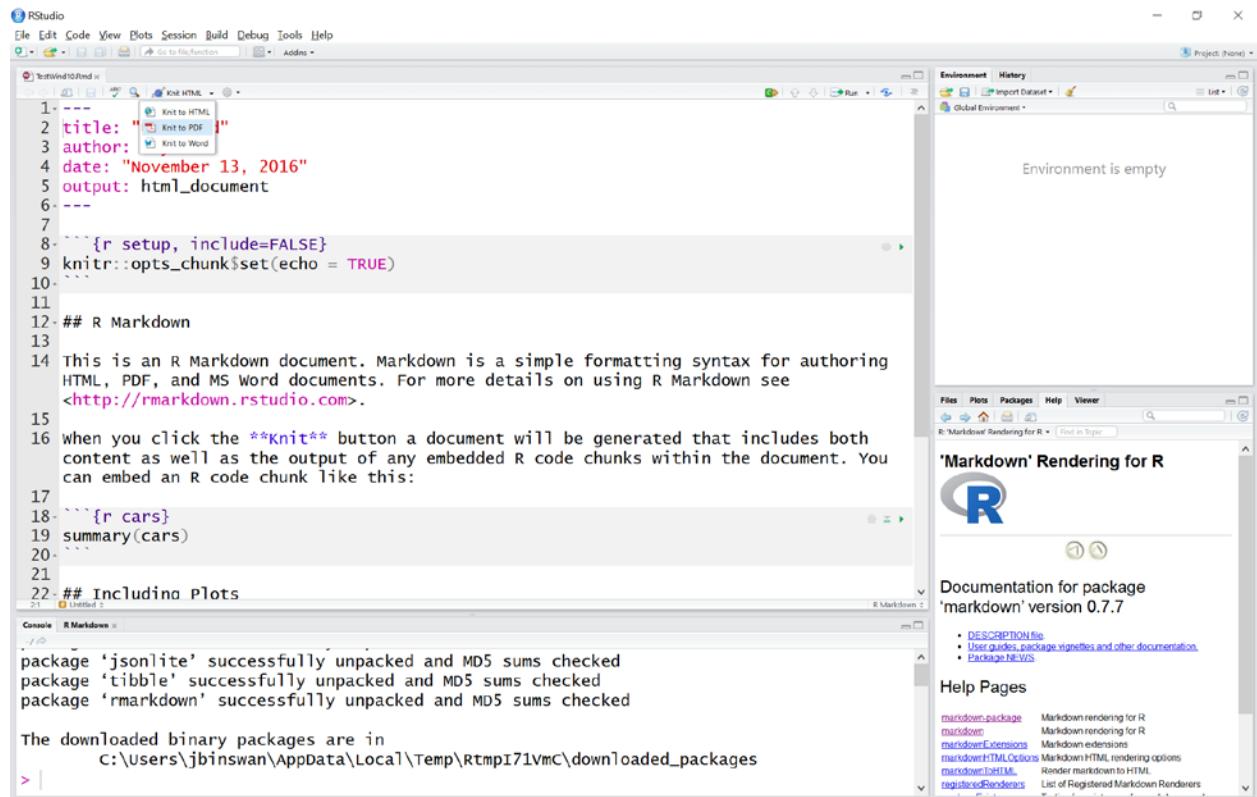


The resulting HTML file looks as follows.

The screenshot shows the RStudio interface with the following components:

- Code Editor:** Displays the R Markdown code for 'TestWind10.Rmd'. The code includes R code chunks and a plot inclusion section.
- Preview Area:** Shows the rendered HTML output titled 'Untitled'. It displays the R Markdown header, a summary table for 'cars', and a scatter plot of 'pressure' vs 'dist'.
- Environment:** Shows an empty environment.
- Help:** Shows the 'own' rendering for package 'rmarkdown' version 0.7.7.

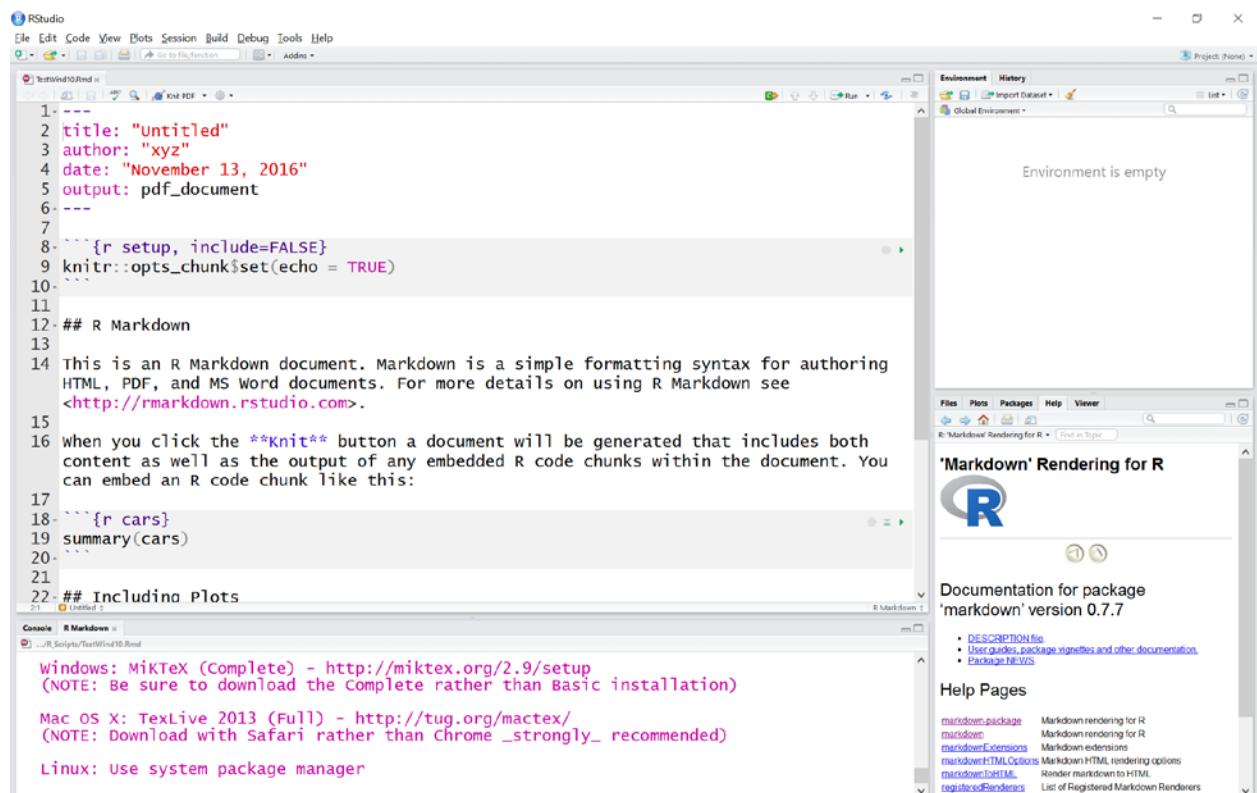
Now, try “Knit to PDF”.



The screenshot shows the RStudio interface with an R Markdown file named "testWind10.Rmd". The code includes a YAML header with "title: 'untitled'" and "output: pdf_document". The main content discusses R Markdown and includes a code chunk for "cars". The RStudio console shows the successful unpacking of packages: "jsonlite", "tibble", and "rmarkdown". A message from the console indicates that the downloaded binary packages are in the directory "C:\Users\jbinswan\AppData\Local\Temp\RtmpI71VmC\downloaded_packages". The "Knit PDF" button is highlighted in the top toolbar.

```
1 ---  
2 title: "untitled"  
3 author: "xyz"  
4 date: "November 13, 2016"  
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 formatting syntax for authoring  
HTML, PDF, and MS Word documents. For more details on using R Markdown see  
<http://rmarkdown.rstudio.com>.  
15  
16 when you click the **Knit** button a document will be generated that includes both  
content as well as the output of any embedded R code chunks within the document. You  
can embed an R code chunk like this:  
17  
18 ```{r cars}  
19 summary(cars)  
20 ...  
21  
22 ## Including Plots  
23  
Console | R Markdown |  
/D  
package 'jsonlite' successfully unpacked and MD5 sums checked  
package 'tibble' successfully unpacked and MD5 sums checked  
package 'rmarkdown' successfully unpacked and MD5 sums checked  
  
The downloaded binary packages are in  
C:\Users\jbinswan\AppData\Local\Temp\RtmpI71VmC\downloaded_packages  
> |
```

Most likely, this will not work. But, friendly as it is, the RStudio console gives you a hint how to proceed. Also, it give the advice to download the Complete rather than the Basic installation of MiKTeX. This is why it will take so much time...



The screenshot shows the RStudio interface with the same R Markdown file "testWind10.Rmd". The code remains the same, including the note about MiKTeX. The RStudio console now displays a note: "Windows: MiKTeX (Complete) - <http://miktex.org/2.9/setup> (NOTE: Be sure to download the Complete rather than Basic installation)". It also includes notes for Mac OS X and Linux. The "Knit PDF" button is again highlighted in the top toolbar.

```
1 ---  
2 title: "untitled"  
3 author: "xyz"  
4 date: "November 13, 2016"  
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 formatting syntax for authoring  
HTML, PDF, and MS Word documents. For more details on using R Markdown see  
<http://rmarkdown.rstudio.com>.  
15  
16 when you click the **Knit** button a document will be generated that includes both  
content as well as the output of any embedded R code chunks within the document. You  
can embed an R code chunk like this:  
17  
18 ```{r cars}  
19 summary(cars)  
20 ...  
21  
22 ## Including Plots  
23  
Console | R Markdown |  
/R/Scripts/TestWind10.Rmd  
Windows: MiKTeX (Complete) - http://miktex.org/2.9/setup  
(NOTE: Be sure to download the Complete rather than Basic installation)  
  
Mac OS X: TeXLive 2013 (Full) - http://tug.org/mactex/  
(NOTE: Download with Safari rather than Chrome _strongly_ recommended)  
  
Linux: Use system package manager
```

If you nevertheless insist on trying the compilation to pdf, you get an error.

The screenshot shows the RStudio interface. On the left, the code editor displays an R Markdown document with the following content:

```
5 output: pdf_document
6 ---
7
8 ---
9 knitr::opts_chunk$set(echo = TRUE)
10
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring
15 HTML, PDF, and MS Word documents. For more details on using R Markdown see
16 <http://rmarkdown.rstudio.com>.
17
18 when you click the Knit button a document will be generated that includes both
19 content as well as the output of any embedded R code chunks within the document. You
20 can embed an R code chunk like this:
21
22 ```{r cars}
23 summary(cars)
24 ```
25
26 ## Including Plots
27
28 You can also embed plots, for example:
29
30 ```{r pressure, echo=FALSE}
31
```

In the console window below, an error message is displayed:

```
pandoc.exe: pdflatex not found; pdflatex is needed for pdf output.
Error: pandoc document conversion failed with error 41
In addition: Warning message:
running command "C:/Program Files/RStudio/bin/pandoc/pandoc" +RTS -K512m -RTS Testwind10.utf8.md --to latex --from markdown+autolink_bare_uris+ascii_identifiers+tex_math_single_backslash --output Testwind10.pdf --template "c:/Users/jbinswan/Documents/R/win-library/3.3/rmarkdown/rmd/latex/default-1.15.2.tex" --highlight-style tango --latex-engine pdflatex --variable graphics=yes --variable "geometry:margin=1in" had status 41
```

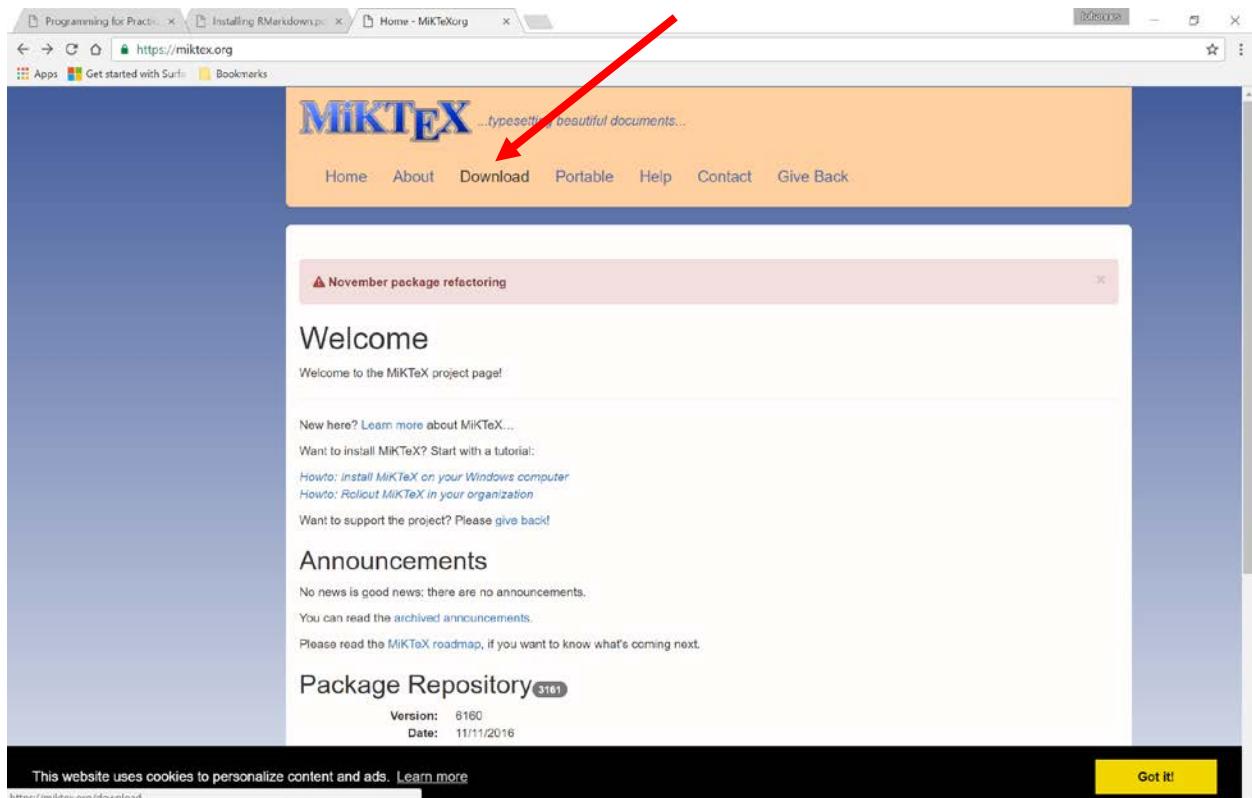
The right panel shows the 'Environment' and 'Help Pages' sections. The 'Environment' section says 'Environment is empty'. The 'Help Pages' section is titled 'Markdown' Rendering for R' and lists various documentation links for the 'markdown' package version 0.7.7.

Go to the MiKTeX website.

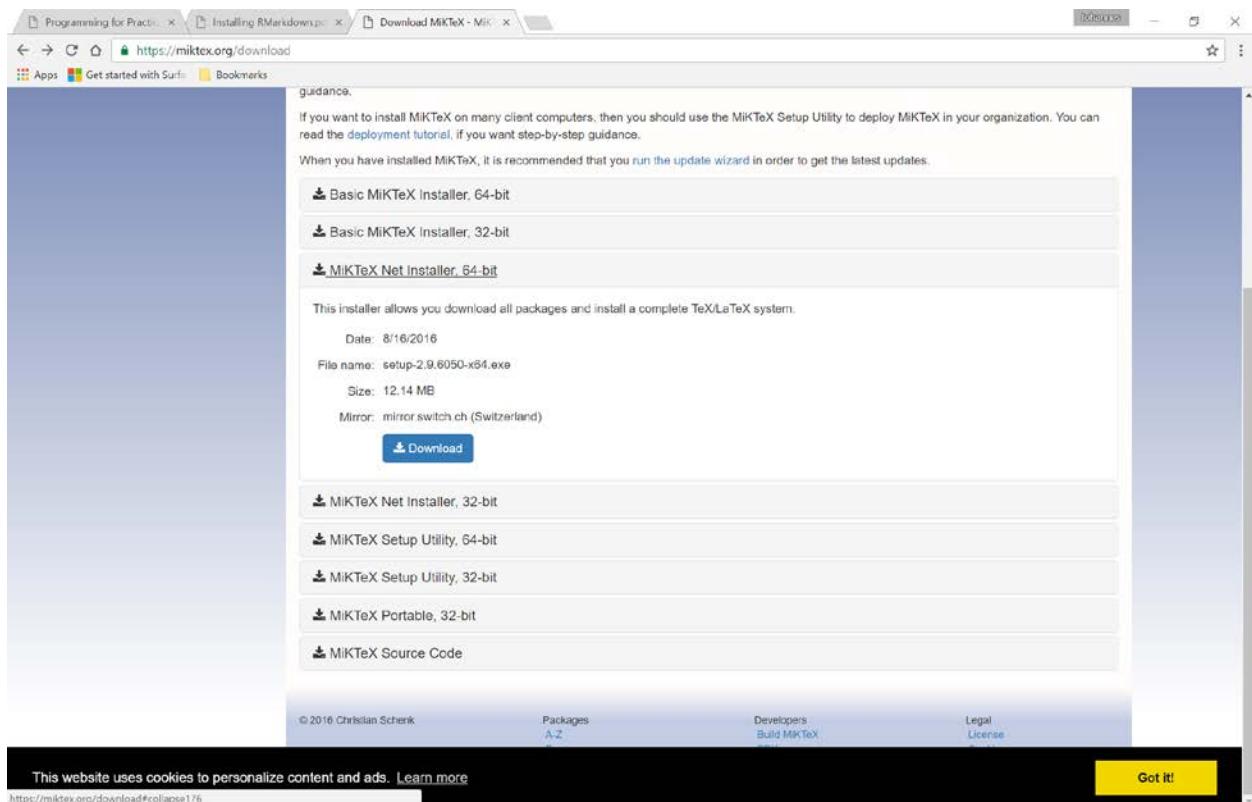
The screenshot shows a Google search results page for 'miktex windows 10'. The top result is a link to the MiKTeX website: [Home - MiKTeXorg](https://miktex.org/). The page content includes:

- Home - MiKTeXorg**
https://miktex.org/ ▾ Diese Seite übersetzen
vor 3 Tagen - Free implementation of TeX and related programs for Windows (all current variants) on x86 systems.
- MiKTeX prerequisites - MiKTeXorg**
https://miktex.org/kb/prerequisites ▾ Diese Seite übersetzen
20.04.2016 - MiKTeX requires one of the following Windows operating systems: Windows 10; Windows 8/8.1 (all editions except RT); Windows 7; Windows ...
- Download MiKTeX - MiKTeXorg**
https://miktex.org/download ▾ Diese Seite übersetzen
Download and run the Basic MiKTeX installer to setup a basic TeX/LaTeX system on your computer.
Please read the tutorial, if you want step-by-step guidance.
- I cannot install MiKTeX 2.9 on windows 10 - TeX - LaTeX Stack ...**
tex.stackexchange.com/.../i-cannot-install-miktex-2-9-on-windo... ▾ Diese Seite übersetzen
27.12.2015 - I am installing MiKTeX on windows 10, the installer continue till the end then it stops, this is the log file initializing setup service... starting ...

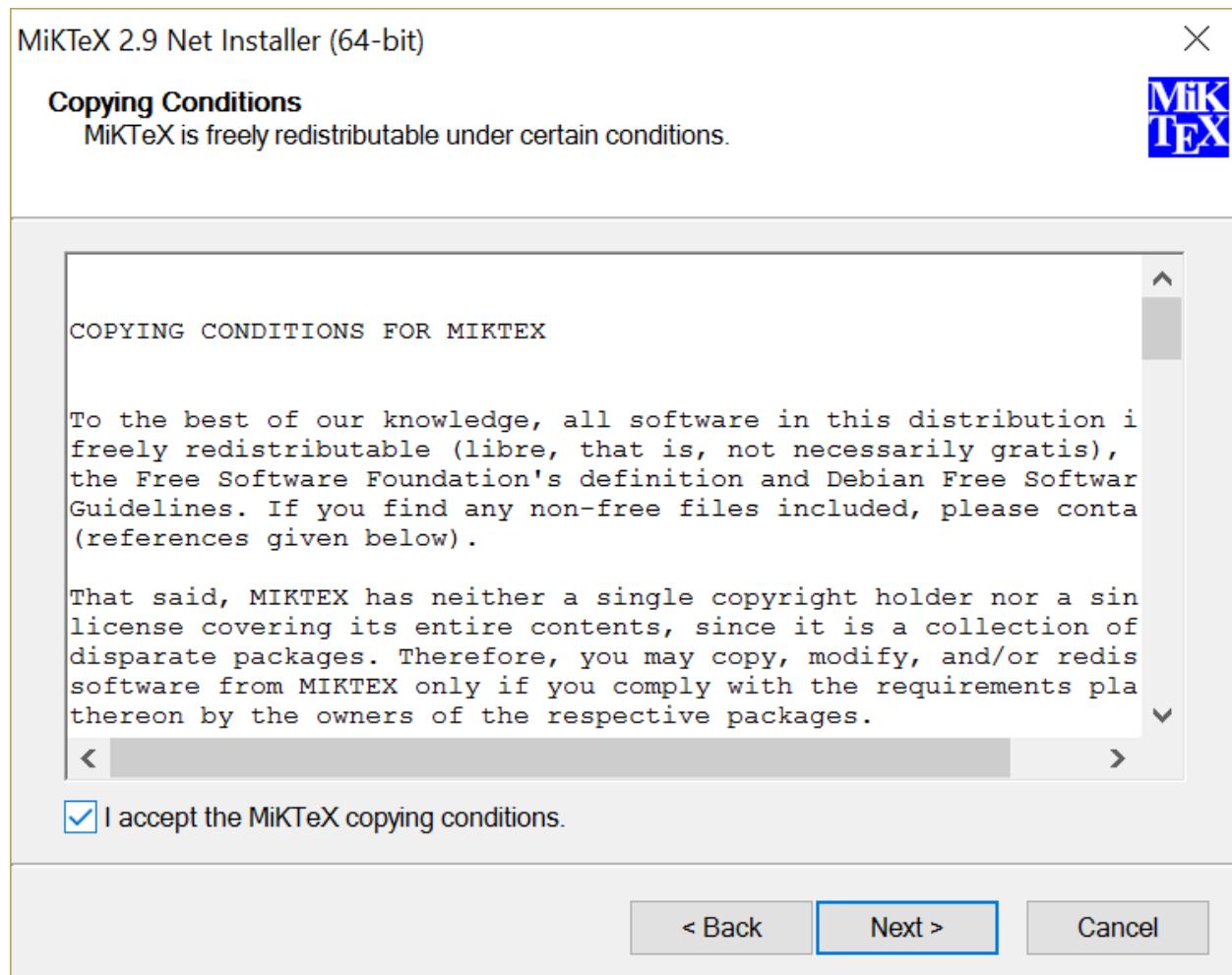
Go to Download



Do NOT choose the Basic installation but rather the MiKTeX Net Installer. Most likely, you will need the 64-bit version. But if your system is 32-bit, then choose that version. Then click Download.



You need to check a few things as shown on the screenshots below



MiKTeX 2.9 Net Installer (64-bit)

X



Task

Choose the task you want carried out.

[Download MiKTeX](#)

MiKTeX will be downloaded into a directory on your computer.

[Connection Settings...](#)

[Install MiKTeX](#)

MiKTeX will be installed from a directory on your computer.

[< Back](#)

[Next >](#)

[Cancel](#)



Package Set

Select the packages you want installed.

Basic MiKTeX

A directory will be created which contains the basic MiKTeX distribution.

This is the recommended option. MiKTeX can be configured to install missing packages automatically (in the course of use).

Complete MiKTeX

A directory will be created which contains the complete MiKTeX distribution.

Don't use this option unless you have a fast and reliable Internet connection.

< Back

Next >

Cancel

MiKTeX 2.9 Net Installer (64-bit)



Download Source

Choose a download source.

Download the MiKTeX distribution from:

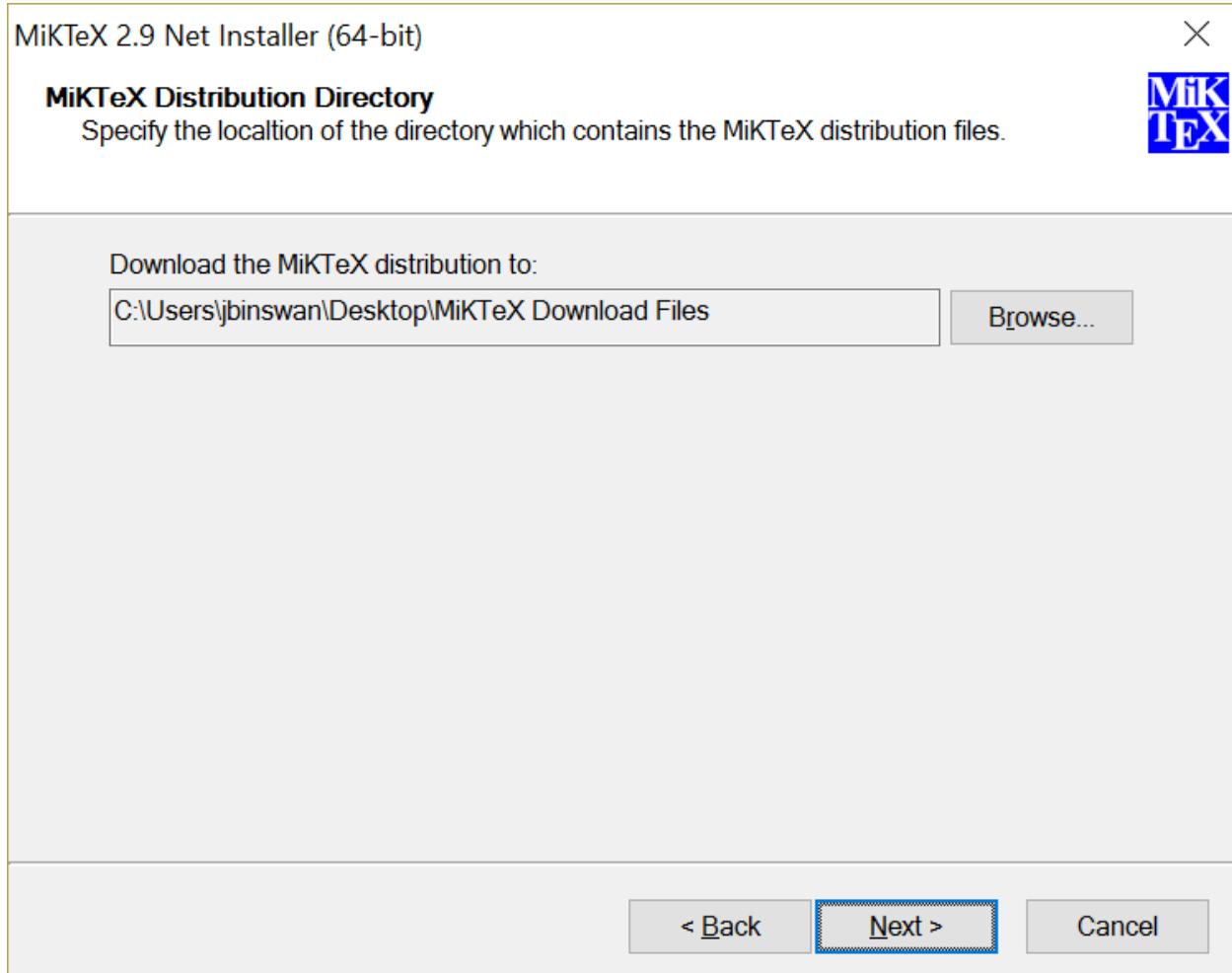
Country	Protocol	Host	Version
South Africa	FTP	ftp.sun.ac.za	12-Nov-16
South Africa	HTTP	ftp.sun.ac.za	12-Nov-16
Sweden	HTTP	ftp.acc.umu.se	12-Nov-16
Switzerland	FTP	mirror.switch.ch	12-Nov-16
Switzerland	HTTP	mirror.switch.ch	12-Nov-16
Taiwan	FTP	ftp.yzu.edu.tw	12-Nov-16
Taiwan	HTTP	ftp.yzu.edu.tw	12-Nov-16
Thailand	HTTP	ctan.megagod.net	12-Nov-16
United Kingdom	FTP	mirror.ox.ac.uk	12-Nov-16
United Kingdom	HTTP	mirror.ox.ac.uk	12-Nov-16
United States	HTTP	mirror.hmc.edu	12-Nov-16
United States	FTP	mirror.jmu.edu	12-Nov-16
United States	HTTP	mirror.tamu.edu	12-Nov-16

< Back

Next >

Cancel

It makes sense to have the installation files on the Desktop. Note that this is only about the DOWNLOAD! Installation comes later.



MiKTeX 2.9 Net Installer (64-bit)



Information

Review the settings.

MiKTeX Setup Wizard has enough information to start the task. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Start.

Download all packages from
<http://mirror.switch.ch/ftp/mirror/tex/systems/win32/miktex/tm/packages/>
to
C:\Users\jbinswan\Desktop\MiKTeX Download Files



< Back

Start

Cancel

MiKTeX 2.9 Net Installer (64-bit)

X

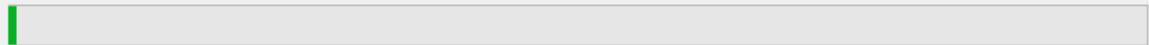


Executing

The main task is being executed.



Downloading: abntex2



Overall progress



initializing setup service...

starting downloader...

starting download...

repository: http://mirror.switch.ch/ftp/mirror/tex/systems/win32/miktex/tm/packages/

download directory: "C:\Users\jbinswan\Desktop\MiKTeX Download Files"

visiting repository http://mirror.switch.ch/ftp/mirror/tex/systems/win32/miktex/tm/packages/...

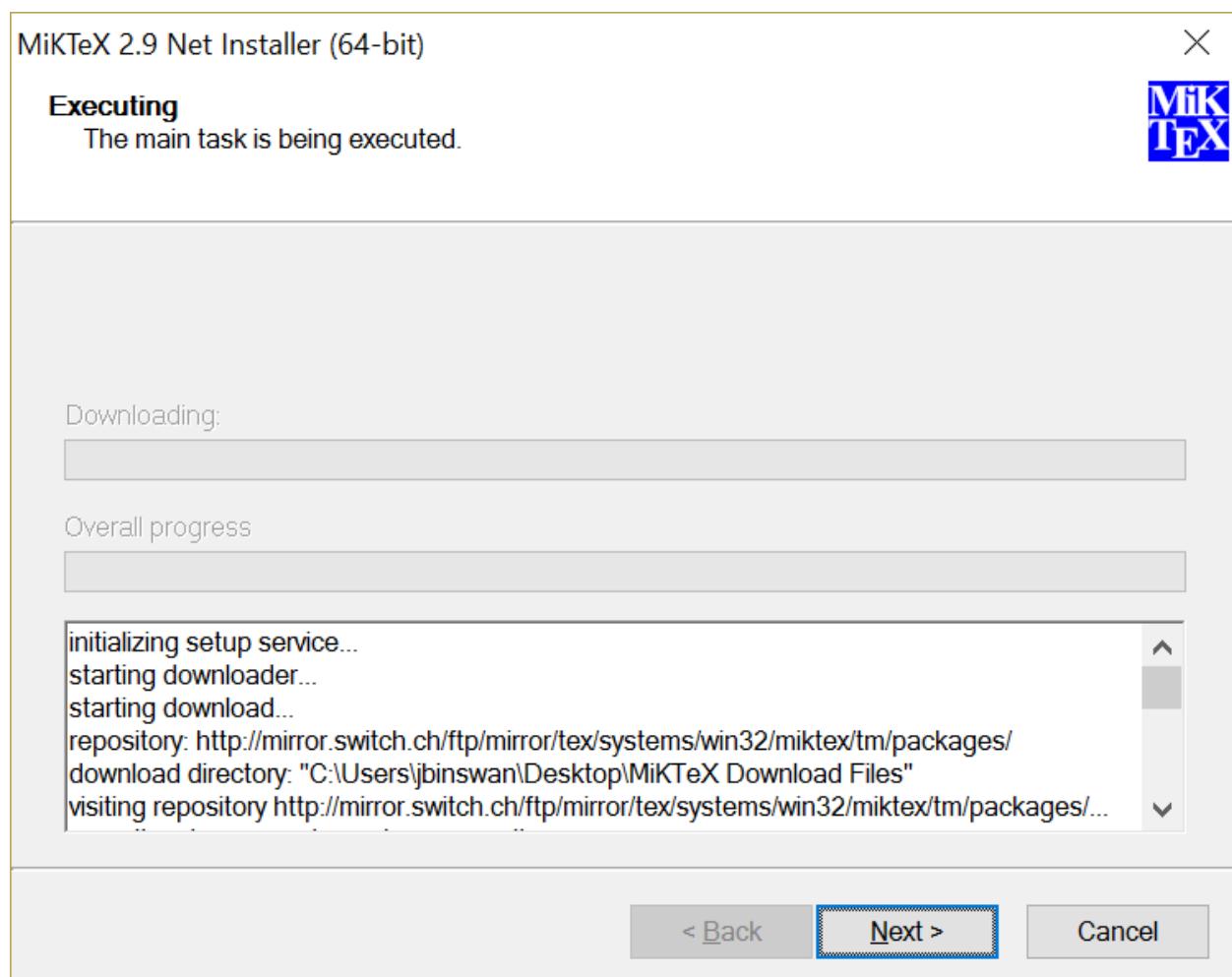
< Back

Next >

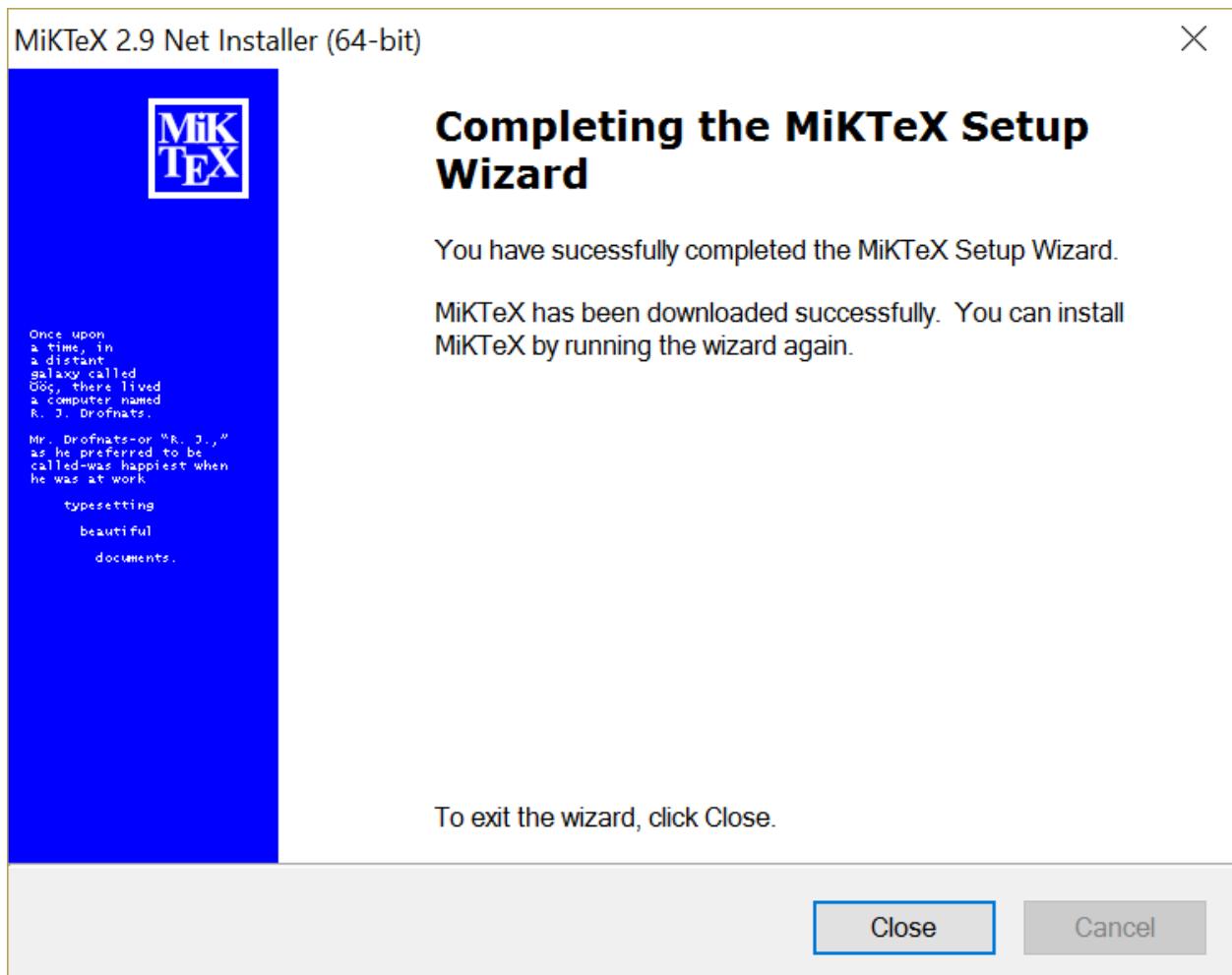
Cancel

This takes VERY LONG!!

Click Next when the download is finished.

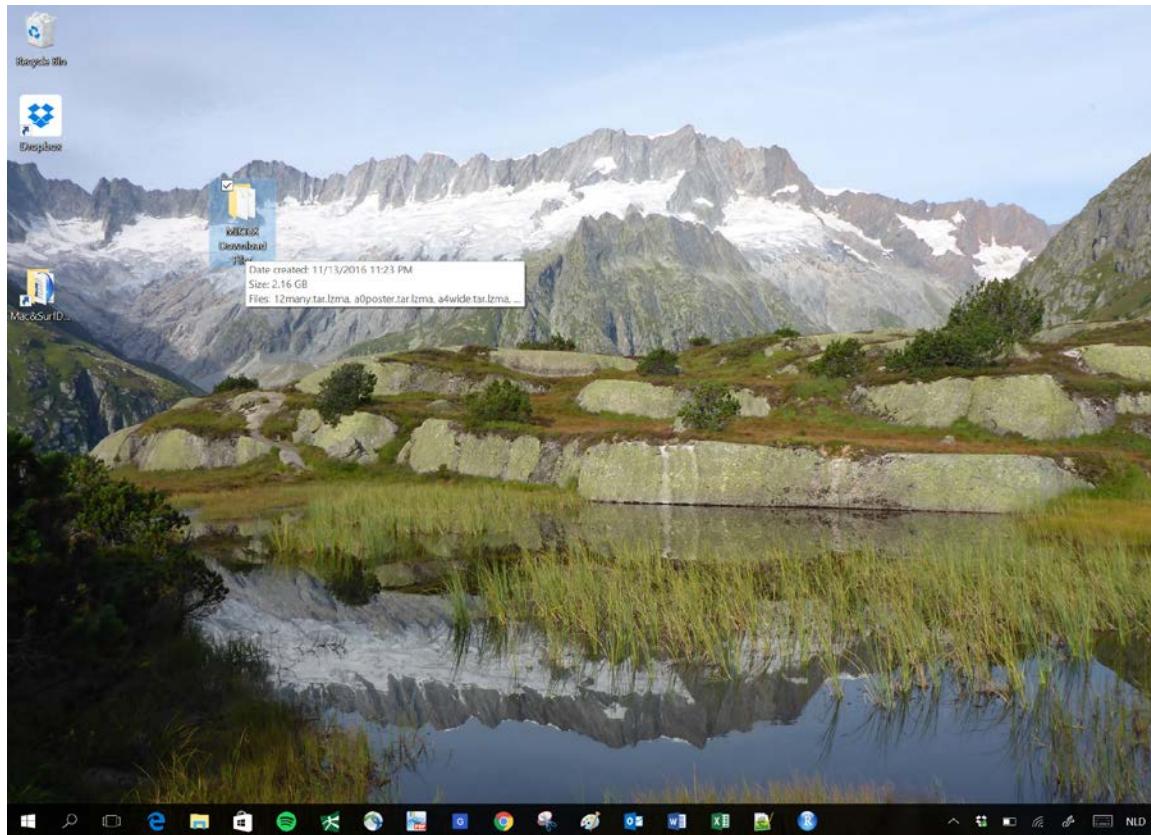


And the download is done...



But not yet the installation...

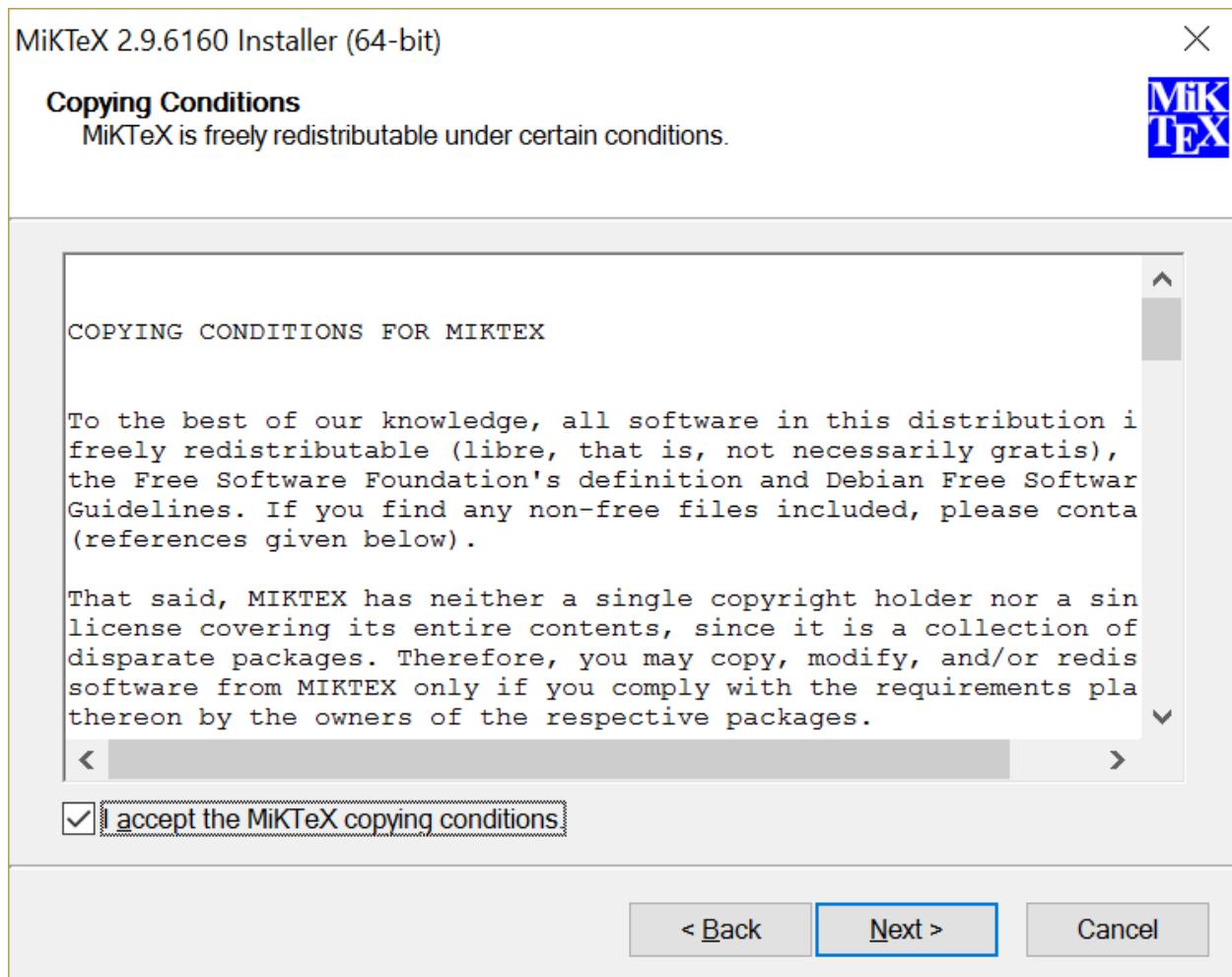
On your desktop (or wherever you put it) you should see a folder with the MiKTeX Download Files.



Open the folder. It contains tons of files; scroll down to the `setup-2.9.6050-x64.exe` file and double-click it.

Name	Date modified	Type	Size
sesmanuel.tar.lzma	11/14/2016 12:01 AM	LZMA File	925 KB
setdeck.tar.lzma	11/14/2016 12:01 AM	LZMA File	64 KB
setspace.tar.lzma	11/14/2016 12:01 AM	LZMA File	9 KB
setup-2.9.6050-x64.exe	11/13/2016 11:17 PM	Application	12,440 KB
seuthesis.tar.lzma	11/13/2016 11:56 PM	LZMA File	2,443 KB
seuthesix.tar.lzma	6 12:01 AM	LZMA File	3,227 KB
sf298.tar.lzma	6 11:30 PM	LZMA File	439 KB
sffms.tar.lzma	6 11:28 PM	LZMA File	172 KB
sfg.tar.lzma	6 11:25 PM	LZMA File	388 KB
sfrmth.tar.lzma	11/13/2016 11:27 PM	LZMA File	5 KB
sgame.tar.lzma	11/14/2016 12:01 AM	LZMA File	73 KB
shade.tar.lzma	11/14/2016 12:01 AM	LZMA File	16 KB
shadethm.tar.lzma	11/13/2016 11:58 PM	LZMA File	361 KB
shadowtext.tar.lzma	11/14/2016 12:01 AM	LZMA File	144 KB
shalom.cab	11/13/2016 11:43 PM	Cabinet File	166 KB
shapepar.tar.lzma	11/14/2016 12:01 AM	LZMA File	181 KB
shapes.tar.lzma	11/13/2016 11:50 PM	LZMA File	186 KB
shdoc.tar.lzma	11/13/2016 11:57 PM	LZMA File	553 KB

Again, you need to check some cases and make some choices as shown below.





Package Set

Select the packages you want installed.

Basic MiKTeX

This is the recommended option. MiKTeX can be configured to install missing files automatically (in the course of use).

Complete MiKTeX

< Back

Next >

Cancel



Shared Installation

You have the option to share the MiKTeX installation with other users.

Install MiKTeX for:

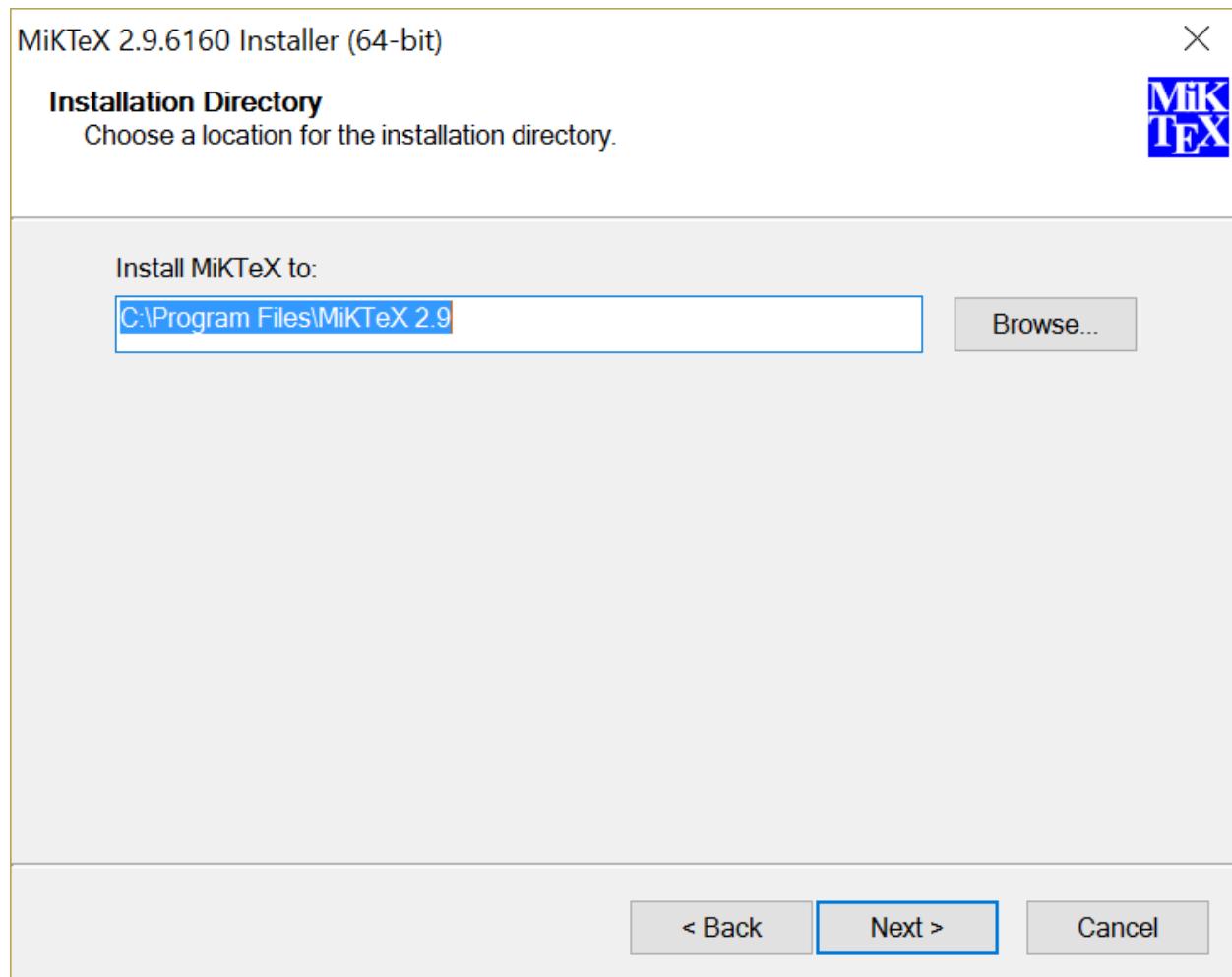
- Anyone who uses this computer (all users)
- Only for: jbinswan

< Back

Next >

Cancel

Most of the time, the default installation directory makes sense.





Settings

Set your preferences.

Preferred paper: A4 ▾

Install missing packages on-the-fly: Ask me first ▾

< Back

Next >

Cancel

MiKTeX 2.9.6160 Installer (64-bit)

X



Information

Review the settings.

MiKTeX Setup Wizard has enough information to start the task. If you want to review or change any of the settings, click Back. If you are satisfied with the settings, click Start.

Install all packages to
C:\Program Files\MiKTeX 2.9

Install MiKTeX for all users

Preferred paper size is A4

Packages will be installed after confirmation by user

< Back

Start

Cancel

MiKTeX 2.9.6160 Installer (64-bit)

X

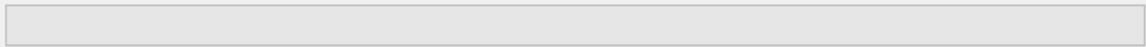


Executing

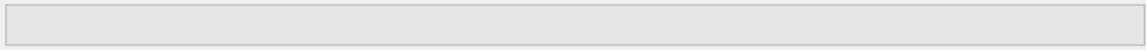
The main task is being executed.



Installing:



Overall progress



initializing setup service...

starting installer...

Loading package database...

< Back

Next >

Cancel

Again, this takes quite long!

MiKTeX 2.9.6160 Installer (64-bit)

X

Executing

The main task is being executed.



Installing:

Overall progress

```
Parsing "C:\Program Files\MiKTeX 2.9\fonts\map\dvips\dutchcal\dutchcal.map"... Parsing "C:\F  
"C:\Program Files\MiKTeX 2.9\fonts\map\dvips\lato\lato.map"... Parsing "C:\Program Files\MiK  
\opensans\opensans.map"... Parsing "C:\Program Files\MiKTeX 2.9\fonts\map\dvips\overlock\  
\dvips\avantgar\uaug.map"... Parsing "C:\Program Files\MiKTeX 2.9\fonts\map\dvips\antiqua\ua  
Parsing "C:\Program Files\MiKTeX 2.9\fonts\map\dvips\bookman\ubk.map"... Parsing "C:\Prog  
Parsing "C:\Program Files\MiKTeX 2.9\fonts\map\dvips\romande\yrd.map"... Parsing "C:\Progr
```

[^ Back](#)

[Next >](#)

Cancel



Completing the MiKTeX Setup Wizard

You have successfully completed the MiKTeX Setup Wizard.

Once upon a time, in a distant galaxy called Dog, there lived a computer named R. J. Dronfatz. Mr. Dronfatz—or “R. J.”, as he preferred to be called—was happiest when he was at work typesetting beautiful documents.

Show the release notes

To exit the wizard, click Close.

[Close](#)

[Cancel](#)

Now close and reopen RStudio. Then choose “Knit to PDF”. It should work now. (If not, restart your computer.)

The screenshot shows the RStudio interface with an R Markdown document open. The code editor contains the following R Markdown code:

```
1 ---  
2 title: "Knit to PDF"  
3 author: "Knit to Word"  
4 date: "November 14, 2016"  
5 output: html_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 formatting syntax for authoring  
HTML, PDF, and MS Word documents. For more details on using R Markdown see  
<http://rmarkdown.rstudio.com>.  
15  
16 when you click the **Knit** button a document will be generated that includes both  
content as well as the output of any embedded R code chunks within the document. You  
can embed an R code chunk like this:  
17  
18 ```{r cars}  
19 summary(cars)  
20  
21 ## Including Plots  
22
```

The R Markdown pane shows the command being run:

```
R Markdown  
C:\Users\jbinswan\R\win-library\3.3\rmarkdown\rmd\h\default.html  
"C:\Users\jbinswan\Documents\R\win-library\3.3\rmarkdown\rmd\h\default.html" --variable  
"theme:bootstrap" --include-in-header "C:\Users\jbinswan\AppData\Local\Temp\RtmpKSNvgj\rma  
rkdown-strida879c02911.html" --mathjax --variable "mathjax-url:https://cdn.mathjax.org/mat  
hjax/latest/MathJax.js?config=TeX-AMS-MML_HTMLorMML" --no-highlight --variable "highligh  
tjs=C:\Users\jbinswan\Documents\R\win-library\3.3\rmarkdown\rmd\h\highlight" --variable "nav  
igationjs=C:\Users\jbinswan\Documents\R\win-library\3.3\rmarkdown\rmd\h\navigation-1.1"
```

The console pane shows the output:

```
Output created: Test.html
```

The right-hand sidebar displays the 'Markdown' Rendering for R documentation, which includes sections for DESCRIPTION file, User guides, package vignettes and other documentation, and Package News.

If you are curious about working with Latex, you need an editor (as you need RStudio for working with R). See the Mac section above in this document about [how to install Texmaker](#). The installation is very similar to the Mac case, so there is no need to guide you through the process. Note that the installation of Texmaker is not mandatory for this course.