

## Docs4 R Markdown Demos: Plot PDF ...

### generate with

This renders but does not run R codes:

```
R -e rmarkdown::render('Docs4+MD+R.md',output_file='test.html')
R -e rmarkdown::render('Docs4+MD+R.md',output_file='test.pdf')
```

This runs R codes and shows images:

```
Rscript -e "library(knitr); knitr('Docs4+MD+R.md')"
```

```
pandoc Docs4+MD+R.txt -t html5 -o test.pdf
```

others

```
Rscript -e "library(knitr); knitr('./Docs4+MD+R+book.Rnw')"
```

```
#pdflatex Docs4+MS+R.tex
```

run

```
R CMD Sweave --pdf Docs4+MD+R+book.Rnw
```

### doc4 R demo

you might need in linux R to clean the environment:

```
sudo apt-get -u dist-upgrade
```

```
4*222
```

```
## [1] 888
```

another

```
my.dir <- getwd()
```

```
list.files(my.dir, recursive= TRUE)
```

```
## [1] "Docs1+MD+Bib.bib"      "Docs1+MD+Bib.md"      "Docs2+Tex.aux"
## [4] "Docs2+Tex.log"         "Docs2+Tex.pdf"        "Docs2+Tex.tex"
## [7] "Docs3+MD+utf.md"       "Docs3+MD+utf.utf8.tex" "Docs4+MD+R+book.Rnw"
## [10] "Docs4+MD+R+book.tex"   "Docs4+MD+R.md"        "Docs4+MD+R.txt"
```

```
## [13] "Docs4+MS+R.tex"          "Docs5+Refs.md"          "Docs6+FigSec.md"
## [16] "Docs6+makefile"          "Docs6+meta.yml"         "Docs6+tplt.tex"
## [19] "figure/Docs2-img.eps"    "figure/nice-fig-1.png"  "ieee.csl"
## [22] "k.pdf"                   "mycontext.tex"          "mytemplate.tex"
## [25] "test.pdf"
```

```
strsplit('hello world', ' ')
```

```
## [[1]]
## [1] "hello" "world"
```

In R also installing the dependencies ‘stringi’, ‘stringr’ ‘digest’, ‘rlang’ htmltools  
withr rmd vs. rnw sudo apt-get install software-properties-common apt install  
-no-install-recommends software-properties-common dirmngr

```
sudo add-apt-repository ppa:ubuntu-toolchain-r/test
https://www.tuxamito.com/wiki/index.php/Installing_newer_GCC_versions_in_Ubuntu
sudo apt-get install libfontconfig1-dev gcc-8 g++-8
sudo update-alternatives --remove-all gcc
sudo update-alternatives --install /usr/bin/gcc gcc /usr/bin/gcc-8 90 --slave /usr/bin/g++ g
sudo ulimit -s 16384      && sudo R -e 'install.packages("stringi");'
conda install -c conda-forge r-bookdown
```

remember some R versioning issues on R 3.2 cannot run, after R4 then in-  
stall.packages(“rmarkdown”, dep = TRUE) rmarkdown::pandoc\_version() nor  
knitr::write\_bib(x = c(“knitr”, “rmarkdown”) , file = “test.bib”)

with bash

```
echo $PATH
```

```
## /home/j/bin:/home/j/.local/bin:/usr/local/texlive/2020/bin/x86_64-linux:/bin:/sbin:/usr/l
```

## Vars

	–variable	–metadata	YAML metadata and –metadata-file
values can be...	strings and bools	strings and bools	also YAML objects and lists
strings are...	inserted verbatim	escaped	interpreted as markdown
accessible by filters:	no	yes	yes

Figures and tables with captions will be placed in **figure** and **table** environ-  
ments, respectively.

```
par(mar = c(4, 4, .1, .1))
plot(pressure, type = 'b', pch = 19)
```

refs see Figure @ref(fig:nice-fig).

can write citations, too. For example, we are using the **bookdown** package [R-bookdown] using R Markdown and **knitr**

## Others

```
## Error in library(ggplot2): there is no package called 'ggplot2'

## Warning in download.file(url = "https://ndownloader.figshare.com/files/
## 7010681", : URL 'https://ndownloader.figshare.com/files/7010681': status was
## 'Couldn't resolve host name'

## Error in download.file(url = "https://ndownloader.figshare.com/files/7010681", : cannot o

## Warning in file(file, "rt"): cannot open file 'data': No such file or directory

## Error in file(file, "rt"): cannot open the connection

##      Mobile      Juneau      Phoenix Little Rock Los Angeles  Sacramento
##      67.0        54.7        7.0        48.5        14.0        17.2

## Error in precip$DATE: $ operator is invalid for atomic vectors

## Error in qplot(x = precip$DATE, y = precip$PRECIP): could not find function "qplot"

and

download.file(url = "https://octodex.github.com/images/bannekat.png",
              destfile = "image.png",
              mode = 'wb')

## Warning in download.file(url = "https://octodex.github.com/images/
## bannekat.png", : URL 'https://octodex.github.com/images/bannekat.png': status
## was 'Couldn't resolve host name'

## Error in download.file(url = "https://octodex.github.com/images/bannekat.png", : cannot o

knitr::include_graphics(path = "figure/Docs2-img.eps") #image.png")
```