knitr Reference Card

Yihui Xie

September 28, 2021

1 Syntax

format	start	end	inline	output
Rnw	`<<*>>=`	`@`	`\Sexpr{x}`	TEX
Rmd	` ```{r *} `	` ``` `	`` `r x` ``	MD
Rhtml	`<!--begin.rcode *`	`end.rcode-->`	`<!--rinline x-->`	HTML
Rrst	`.. {r *}`	`.. ..`	`:r:`x``	reST
Rtex	`% begin.rcode *`	`% end.rcode`	`\rinline{x}`	TEX
Rasciidoc	`// begin.rcode *`	`// end.rcode`	`+r x+`	AsciiDoc
Rtextile	`### begin.rcode *`	`### end.rcode`	`@r x@`	Textile
brew			`<% x %>`	text

* denotes local chunk options, e.g. `<<label, eval=FALSE>>=`; x denotes inline R code, e.g. `` `r 1+2` `` (MD stands for Markdown)

2 Minimal Examples

2.1 Sweave (*.Rnw)

```
\documentclass{article}
\begin{document}

Below is a code chunk.
<<foo, echo=TRUE>>=
z = 1+1
plot(cars)
@

The value of z is \Sexpr{z}.
\end{document}
```

2.2 R Markdown (*.Rmd)

```
Hi _markdown_!

```{r foo, echo=TRUE}
z = 1+1
plot(cars)
```

The value of z is `r z`.
```

2.3 Brew (*.brew)

```
The value of pi is <% pi %>.
```

3 Chunk Options

`opts_chunk` controls global chunk options, e.g. `opts_chunk$set(tidy = FALSE)`, which can be overridden by local chunk options. See all options at `https://yihui.org/knitr/options/`; some frequently used options:

eval whether to evaluate the chunk
echo whether to echo source code
results 'markup', 'asis', 'hold', 'hide'
tidy whether to reformat R code
cache whether to cache results
fig.width, fig.height, out.width, out.height device and output size of figures
include whether to include the chunk results in output
child filenames of child documents
engine language name (R, python, . . .)

4 Functions

`knit()` the main function in this package; knit input document and write output
`purl()` extract R code from an input document
`spin()` spin goat's hair (an R script with roxygen comments) into wool (a literate programming document to be passed to `knit()`)
`stitch()` insert an R script into a template and compile the document
`knit_hooks$set()` set or reset chunk and output hooks

5 Resources

- homepage: `https://yihui.org/knitr/`
- development repository: `https://github.com/yihui/knitr` (CRAN,
- examples: `https://github.com/yihui/knitr-examples`
- stackoverflow: `http://stackoverflow.com/tags/knitr/`
- mailing list: `https://groups.google.com/group/knitr`