

# knitr Reference Card

Yihui Xie

April 23, 2015

## 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 <http://yihui.name/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: <http://yihui.name/knitr>
- development repository: <https://github.com/yihui/knitr> (CRAN, Rforge)
- examples: <https://github.com/yihui/knitr-examples>
- stackoverflow: <http://stackoverflow.com/tags/knitr/>
- mailing list: <https://groups.google.com/group/knitr>