

# knitr Reference Card

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## 1 Syntax

| format | start             | end          | inline           | output           |
|--------|-------------------|--------------|------------------|------------------|
| Rnw    | <<*>=>            | @            | \Sexpr{x}        | T <sub>E</sub> X |
| 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}      | T <sub>E</sub> X |
| 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}

### 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

### 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 %>.

**echo** whether to echo source code

**results** 'markup', 'asis', '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/questions/tagged/knitr>
- mailing list: <https://groups.google.com/group/knitr>