

knitr Reference Card

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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 |
| 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 %>.

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>

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