

LaTeX packages for R and Advanced knitr

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More ways to combine R and LaTeX

- ▶ `xtable` - formats R tables and data frames as LaTeX tables
- ▶ `Hmisc` - generic methods for displaying R objects in LaTeX
- ▶ Additional knitr options for formatting R output: `\Sexpr{}`, `results='asis'`, and more

Creating LaTeX Tables with xtable

```
library(xtable)
data(iris)
xtable(head(iris))
```

	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	5.10	3.50	1.40	0.20	setosa
2	4.90	3.00	1.40	0.20	setosa
3	4.70	3.20	1.30	0.20	setosa
4	4.60	3.10	1.50	0.20	setosa
5	5.00	3.60	1.40	0.20	setosa
6	5.40	3.90	1.70	0.40	setosa

Creating LaTeX Tables with xtable

```
?xtable
?print.xtable
print(xtable(head(iris), caption="Iris dataset included with R"),
      include.rownames=FALSE, size="footnotesize")
```

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.10	3.50	1.40	0.20	setosa
4.90	3.00	1.40	0.20	setosa
4.70	3.20	1.30	0.20	setosa
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5.00	3.60	1.40	0.20	setosa
5.40	3.90	1.70	0.40	setosa

Table: Iris dataset included with R

Your Turn

Modify `blank.Rnw` to do the following:

- ▶ Use the `digits` option in `xtable` to display only one decimal for the Sepal measurements
- ▶ Change the table caption
- ▶ Set the table reference label to "irisdata" and reference it in a sentence outside the code chunk
- ▶ Remove the row number from the table display

```
library(xtable)
data(iris)
print(xtable(head(iris), digits=c(0, 1, 1, 2, 2, 0)), include.rownames=
```