The xtable gallery

Jonathan Swinton
jonathan@swintons.net

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1 Summary

This document gives a gallery of tables which can be made by using the `xtable` package to create LaTeX output. It doubles as a regression check for the package.

```
> library(xtable)
```

2 Gallery

2.1 Data frame

Load example dataset

```
> data(tli)
> tli.table <- xtable(tli[1:10, ])
> digits(tli.table)[c(2, 6)] <- 0

> print(tli.table, floating = FALSE)
```

	grade	sex	disadvg	ethnicty	tlimth
1	6	M	YES	HISPANIC	43
2	7	M	NO	BLACK	88
3	5	F	YES	HISPANIC	34
4	3	M	YES	HISPANIC	65
5	8	M	YES	WHITE	75
6	5	M	NO	BLACK	74
7	8	F	YES	HISPANIC	72
8	4	M	YES	BLACK	79
9	6	M	NO	WHITE	88
10	7	M	YES	HISPANIC	87

2.2 Matrix

```
> design.matrix <- model.matrix(~sex * grade, data = tli[1:10,
+     ])
> design.table <- xtable(design.matrix)

> print(design.table, floating = FALSE)
```

	(Intercept)	sexM	grade	sexM:grade
1	1.00	1.00	6.00	6.00
2	1.00	1.00	7.00	7.00
3	1.00	0.00	5.00	0.00
4	1.00	1.00	3.00	3.00
5	1.00	1.00	8.00	8.00
6	1.00	1.00	5.00	5.00
7	1.00	0.00	8.00	0.00
8	1.00	1.00	4.00	4.00
9	1.00	1.00	6.00	6.00
10	1.00	1.00	7.00	7.00

2.3 aov

```
> fm1 <- aov(tlimth ~ sex + ethnicty + grade + disadvg, data = tli)
> fm1.table <- xtable(fm1)

> print(fm1.table, floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
sex	1	75.37	75.37	0.38	0.5417
ethnicty	3	2572.15	857.38	4.27	0.0072
grade	1	36.31	36.31	0.18	0.6717
disadvg	1	59.30	59.30	0.30	0.5882
Residuals	93	18682.87	200.89		

2.4 lm

```
> fm2 <- lm(tlimth ~ sex * ethnicty, data = tli)
> fm2.table <- xtable(fm2)

> print(fm2.table, floating = FALSE)
```

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	73.6364	4.2502	17.33	0.0000
sexM	−1.6364	5.8842	−0.28	0.7816
ethnictyHISPANIC	−9.7614	6.5501	−1.49	0.1395
ethnictyOTHER	15.8636	10.8360	1.46	0.1466
ethnictyWHITE	4.7970	4.9687	0.97	0.3368
sexM:ethnictyHISPANIC	10.6780	8.7190	1.22	0.2238
sexM:ethnictyWHITE	5.1230	7.0140	0.73	0.4670

2.4.1 anova object

```
> print(xtable(anova(fm2)), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
sex	1	75.37	75.37	0.38	0.5395
ethnicty	3	2572.15	857.38	4.31	0.0068
sex:ethnicty	2	298.43	149.22	0.75	0.4748
Residuals	93	18480.04	198.71		

2.4.2 Another anova object

```
> fm2b <- lm(tlimth ~ ethnicty, data = tli)

> print(xtable(anova(fm2b, fm2)), floating = FALSE)
```

	Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
1	96	19053.59				
2	93	18480.04	3	573.55	0.96	0.4141

2.5 glm

```
> fm3 <- glm(disadvg ~ ethnicty * grade, data = tli, family = binomial())
> fm3.table <- xtable(fm3)

> print(fm3.table, floating = FALSE)
```

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	3.1888	1.5966	2.00	0.0458
ethnictyHISPANIC	−0.2848	2.4808	−0.11	0.9086
ethnictyOTHER	212.1701	22122.7093	0.01	0.9923
ethnictyWHITE	−8.8150	3.3355	−2.64	0.0082
grade	−0.5308	0.2892	−1.84	0.0665
ethnictyHISPANIC:grade	0.2448	0.4357	0.56	0.5742
ethnictyOTHER:grade	−32.6014	3393.4687	−0.01	0.9923
ethnictyWHITE:grade	1.0171	0.5185	1.96	0.0498

2.5.1 anova object

```
> print(xtable(anova(fm3)), floating = FALSE)
```

	Df	Deviance	Resid. Df	Resid. Dev
NULL			99	129.49
ethnicty	3	47.24	96	82.25
grade	1	1.73	95	80.52
ethnicty:grade	3	7.20	92	73.32

2.6 More aov

```
> N <- c(0, 1, 0, 1, 1, 1, 0, 0, 0, 1, 1, 0, 1, 1, 0, 0, 1, 0,
+     1, 0, 1, 1, 0, 0)
> P <- c(1, 1, 0, 0, 0, 1, 0, 1, 1, 1, 0, 0, 0, 1, 0, 1, 1, 0,
+     0, 1, 0, 1, 1, 0)
> K <- c(1, 0, 0, 1, 0, 1, 1, 0, 0, 1, 0, 1, 0, 1, 1, 0, 0, 0,
+     1, 1, 1, 0, 1, 0)
> yield <- c(49.5, 62.8, 46.8, 57, 59.8, 58.5, 55.5, 56, 62.8,
+     55.8, 69.5, 55, 62, 48.8, 45.5, 44.2, 52, 51.5, 49.8, 48.8,
+     57.2, 59, 53.2, 56)
> npk <- data.frame(block = gl(6, 4), N = factor(N), P = factor(P),
+     K = factor(K), yield = yield)
> npk.aov <- aov(yield ~ block + N * P * K, npk)
> op <- options(contrasts = c("contr.helmert", "contr.treatment"))
```

```
> npk.aovE <- aov(yield ~ N * P * K + Error(block), npk)
> options(op)

> print(xtable(npk.aov), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
block	5	343.29	68.66	4.45	0.0159
N	1	189.28	189.28	12.26	0.0044
P	1	8.40	8.40	0.54	0.4749
K	1	95.20	95.20	6.17	0.0288
N:P	1	21.28	21.28	1.38	0.2632
N:K	1	33.14	33.14	2.15	0.1686
P:K	1	0.48	0.48	0.03	0.8628
Residuals	12	185.29	15.44		

2.6.1 anova object

```
> print(xtable(anova(npk.aov)), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
block	5	343.29	68.66	4.45	0.0159
N	1	189.28	189.28	12.26	0.0044
P	1	8.40	8.40	0.54	0.4749
K	1	95.20	95.20	6.17	0.0288
N:P	1	21.28	21.28	1.38	0.2632
N:K	1	33.14	33.14	2.15	0.1686
P:K	1	0.48	0.48	0.03	0.8628
Residuals	12	185.29	15.44		

2.6.2 Another anova object

```
> print(xtable(summary(npk.aov)), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
block	5	343.29	68.66	4.45	0.0159
N	1	189.28	189.28	12.26	0.0044
P	1	8.40	8.40	0.54	0.4749
K	1	95.20	95.20	6.17	0.0288
N:P	1	21.28	21.28	1.38	0.2632
N:K	1	33.14	33.14	2.15	0.1686
P:K	1	0.48	0.48	0.03	0.8628
Residuals	12	185.29	15.44		

```
> print(xtable(npk.aovE), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
N:P:K	1	37.00	37.00	0.48	0.5252
Residuals	4	306.29	76.57		
N	1	189.28	189.28	12.26	0.0044
P	1	8.40	8.40	0.54	0.4749
K	1	95.20	95.20	6.17	0.0288
N:P	1	21.28	21.28	1.38	0.2632
N:K	1	33.14	33.14	2.15	0.1686
P:K	1	0.48	0.48	0.03	0.8628
Residuals1	12	185.29	15.44		

```
> print(xtable(summary(npk.aovE)), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
N:P:K	1	37.00	37.00	0.48	0.5252
Residuals	4	306.29	76.57		
N	1	189.28	189.28	12.26	0.0044
P	1	8.40	8.40	0.54	0.4749
K	1	95.20	95.20	6.17	0.0288
N:P	1	21.28	21.28	1.38	0.2632
N:K	1	33.14	33.14	2.15	0.1686
P:K	1	0.48	0.48	0.03	0.8628
Residuals1	12	185.29	15.44		

2.7 More lm

```
> ctl <- c(4.17, 5.58, 5.18, 6.11, 4.5, 4.61, 5.17, 4.53, 5.33,
+     5.14)
> trt <- c(4.81, 4.17, 4.41, 3.59, 5.87, 3.83, 6.03, 4.89, 4.32,
+     4.69)
> group <- gl(2, 10, 20, labels = c("Ctl", "Trt"))
> weight <- c(ctl, trt)
> lm.D9 <- lm(weight ~ group)

> print(xtable(lm.D9), floating = FALSE)
```

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	5.0320	0.2202	22.85	0.0000
groupTrt	−0.3710	0.3114	−1.19	0.2490

```
> print(xtable(anova(lm.D9)), floating = FALSE)
```

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
group	1	0.69	0.69	1.42	0.2490
Residuals	18	8.73	0.48		

2.8 More glm

```
> counts <- c(18, 17, 15, 20, 10, 20, 25, 13, 12)
> outcome <- gl(3, 1, 9)
> treatment <- gl(3, 3)
> d.AD <- data.frame(treatment, outcome, counts)
> glm.D93 <- glm(counts ~ outcome + treatment, family = poisson())
```

```
> print(xtable(glm.D93, align = "r|llrc"), floating = FALSE)
```

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	3.0445	0.1709	17.81	0.0000
outcome2	−0.4543	0.2022	−2.25	0.0246
outcome3	−0.2930	0.1927	−1.52	0.1285
treatment2	0.0000	0.2000	0.00	1.0000
treatment3	0.0000	0.2000	0.00	1.0000

2.9 prcomp

```
> if (require(stats, quietly = TRUE)) {
+     data(USArrests)
+     pr1 <- prcomp(USArrests)
+ }

> if (require(stats, quietly = TRUE)) {
+     print(xtable(pr1), floating = FALSE)
+ }
```

	PC1	PC2	PC3	PC4
Murder	0.0417	−0.0448	0.0799	−0.9949
Assault	0.9952	−0.0588	−0.0676	0.0389
UrbanPop	0.0463	0.9769	−0.2005	−0.0582
Rape	0.0752	0.2007	0.9741	0.0723

```
> print(xtable(summary(pr1)), floating = FALSE)
```

	PC1	PC2	PC3	PC4
Standard deviation	83.7324	14.2124	6.4894	2.4828
Proportion of Variance	0.9655	0.0278	0.0058	0.0008
Cumulative Proportion	0.9655	0.9933	0.9991	1.0000

2.10 Time series

```
> temp.ts <- ts(cumsum(1 + round(rnorm(100), 0)), start = c(1954,
+     7), frequency = 12)
> temp.table <- xtable(temp.ts, digits = 0)
> caption(temp.table) <- "Time series example"

> print(temp.table, floating = FALSE)
```

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1954		3	13	27	39	51	61	72	82	91	95	103
1955		5	13	29	40	51	63	74	82	91	97	103
1956		6	16	31	42	52	66	73	84	91	97	104
1957		9	18	32	44	54	67	74	86	92	100	104
1958		10	19	35	44	55	67	77	86	91	100	106
1959		11	19	35	46	56	69	78	87	92	101	107
1960	1	13	20	35	49	58	68	80	88	93	102	106
1961	1	12	21	37	49	59	70	80	89	95	102	
1962	3	12	24	38	48	60	71	81	91	96	103	

3 Sanitization

```
> insane <- data.frame(Name = c("Ampersand", "Greater than", "Less than",
+     "Underscore", "Per cent", "Dollar", "Backslash", "Hash",
+     "Caret", "Tilde", "Left brace", "Right brace"), Character = I(c("&",
+     ">", "<", "_", "%", "$", "\\", "#", "^", "~", "{", "}")))
> colnames(insane)[2] <- paste(insane[, 2], collapse = "")

> print(xtable(insane))
```

	Name	&><_%$\#^~{}
1	Ampersand	&
2	Greater than	>
3	Less than	<
4	Underscore	_
5	Per cent	%
6	Dollar	$
7	Backslash	\
8	Hash	#
9	Caret	^
10	Tilde	~
11	Left brace	{
12	Right brace	}

Sometimes you might want to have your own sanitization function

```
> wanttex <- xtable(data.frame(label = paste("Value_is $10^{-",
+     1:3, "}$", sep = "")))

> print(wanttex, sanitize.text.function = function(str) gsub("_",
+     "\\_", str, fixed = TRUE))
```

	label
1	Value_is 10^{-1}
2	Value_is 10^{-2}
3	Value_is 10^{-3}

4 Format examples

4.1 Adding a centering environment

```
> print(xtable(lm.D9, caption = "\\tt latex.environment=NULL"),
+     latex.environment = NULL)


> print(xtable(lm.D9, caption = "\\tt latex.environment=\"\""),
+     latex.environment = "")
```

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	5.0320	0.2202	22.85	0.0000
groupTrt	−0.3710	0.3114	−1.19	0.2490

Table 1: `latex.environment=NULL`

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	5.0320	0.2202	22.85	0.0000
groupTrt	−0.3710	0.3114	−1.19	0.2490

Table 2: `latex.environment=""`

```
> print(xtable(lm.D9, caption = "\\tt latex.environment=\"center\""),
+     latex.environment = "center")
```

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	5.0320	0.2202	22.85	0.0000
groupTrt	−0.3710	0.3114	−1.19	0.2490

Table 3: `latex.environment="center"`

4.2 Column alignment

```
> tli.table <- xtable(tli[1:10, ])

> align(tli.table) <- rep("r", 6)

> print(tli.table, floating = FALSE)
```

	grade	sex	disadvg	ethnicty	tlimth
1	6.00	M	YES	HISPANIC	43.00
2	7.00	M	NO	BLACK	88.00
3	5.00	F	YES	HISPANIC	34.00
4	3.00	M	YES	HISPANIC	65.00
5	8.00	M	YES	WHITE	75.00
6	5.00	M	NO	BLACK	74.00
7	8.00	F	YES	HISPANIC	72.00
8	4.00	M	YES	BLACK	79.00
9	6.00	M	NO	WHITE	88.00
10	7.00	M	YES	HISPANIC	87.00

4.2.1 Single string and column lines

```
> align(tli.table) <- "|rrl|l|lr|"

> print(tli.table, floating = FALSE)
```

	grade	sex	disadvg	ethnicty	tlimth
1	6.00	M	YES	HISPANIC	43.00
2	7.00	M	NO	BLACK	88.00
3	5.00	F	YES	HISPANIC	34.00
4	3.00	M	YES	HISPANIC	65.00
5	8.00	M	YES	WHITE	75.00
6	5.00	M	NO	BLACK	74.00
7	8.00	F	YES	HISPANIC	72.00
8	4.00	M	YES	BLACK	79.00
9	6.00	M	NO	WHITE	88.00
10	7.00	M	YES	HISPANIC	87.00

4.2.2 Fixed width columns

```
> align(tli.table) <- "|rr|lp{3cm}l|r|"

> print(tli.table, floating = FALSE)
```

	grade	sex	disadvg	ethnicty	tlimth
1	6.00	M	YES	HISPANIC	43.00
2	7.00	M	NO	BLACK	88.00
3	5.00	F	YES	HISPANIC	34.00
4	3.00	M	YES	HISPANIC	65.00
5	8.00	M	YES	WHITE	75.00
6	5.00	M	NO	BLACK	74.00
7	8.00	F	YES	HISPANIC	72.00
8	4.00	M	YES	BLACK	79.00
9	6.00	M	NO	WHITE	88.00
10	7.00	M	YES	HISPANIC	87.00

4.3 Significant digits

Specify with a single argument

```
> digits(tli.table) <- 3

> print(tli.table, floating = FALSE, )
```

	grade	sex	disadvg	ethnicty	tlimth
1	6.000	M	YES	HISPANIC	43.000
2	7.000	M	NO	BLACK	88.000
3	5.000	F	YES	HISPANIC	34.000
4	3.000	M	YES	HISPANIC	65.000
5	8.000	M	YES	WHITE	75.000
6	5.000	M	NO	BLACK	74.000
7	8.000	F	YES	HISPANIC	72.000
8	4.000	M	YES	BLACK	79.000
9	6.000	M	NO	WHITE	88.000
10	7.000	M	YES	HISPANIC	87.000

or one for each column, counting the row names

```
> digits(tli.table) <- 1:(ncol(tli) + 1)
```

```
> print(tli.table, floating = FALSE, )
```

	grade	sex	disadvg	ethnicty	tlimth
1	6.00	M	YES	HISPANIC	43.000000
2	7.00	M	NO	BLACK	88.000000
3	5.00	F	YES	HISPANIC	34.000000
4	3.00	M	YES	HISPANIC	65.000000
5	8.00	M	YES	WHITE	75.000000
6	5.00	M	NO	BLACK	74.000000
7	8.00	F	YES	HISPANIC	72.000000
8	4.00	M	YES	BLACK	79.000000
9	6.00	M	NO	WHITE	88.000000
10	7.00	M	YES	HISPANIC	87.000000

or as a full matrix

```
> digits(tli.table) <- matrix(0:4, nrow = 10, ncol = ncol(tli) +
+     1)

> print(tli.table, floating = FALSE, )
```

	grade	sex	disadvg	ethnicty	tlimth
1	6	M	YES	HISPANIC	43
2	7.0	M	NO	BLACK	88.0
3	5.00	F	YES	HISPANIC	34.00
4	3.000	M	YES	HISPANIC	65.000
5	8.0000	M	YES	WHITE	75.0000
6	5	M	NO	BLACK	74
7	8.0	F	YES	HISPANIC	72.0
8	4.00	M	YES	BLACK	79.00
9	6.000	M	NO	WHITE	88.000
10	7.0000	M	YES	HISPANIC	87.0000

4.4 Suppress row names

```
> print((tli.table), include.rownames = FALSE, floating = FALSE)
```

grade	sex	disadvg	ethnicty	tlimth
6	M	YES	HISPANIC	43
7.0	M	NO	BLACK	88.0
5.00	F	YES	HISPANIC	34.00
3.000	M	YES	HISPANIC	65.000
8.0000	M	YES	WHITE	75.0000
5	M	NO	BLACK	74
8.0	F	YES	HISPANIC	72.0
4.00	M	YES	BLACK	79.00
6.000	M	NO	WHITE	88.000
7.0000	M	YES	HISPANIC	87.0000

4.5 Suppress column names

```
> print((tli.table), include.colnames = FALSE, floating = FALSE)
```

1	6	M	YES	HISPANIC	43
2	7.0	M	NO	BLACK	88.0
3	5.00	F	YES	HISPANIC	34.00
4	3.000	M	YES	HISPANIC	65.000
5	8.0000	M	YES	WHITE	75.0000
6	5	M	NO	BLACK	74
7	8.0	F	YES	HISPANIC	72.0
8	4.00	M	YES	BLACK	79.00
9	6.000	M	NO	WHITE	88.000
10	7.0000	M	YES	HISPANIC	87.0000

Note the doubled header lines which can be suppressed with, eg,

```
> print(tli.table, include.colnames = FALSE, floating = FALSE,
+     hline.after = c(0, nrow(tli.table)))
```

1	6	M	YES	HISPANIC	43
2	7.0	M	NO	BLACK	88.0
3	5.00	F	YES	HISPANIC	34.00
4	3.000	M	YES	HISPANIC	65.000
5	8.0000	M	YES	WHITE	75.0000
6	5	M	NO	BLACK	74
7	8.0	F	YES	HISPANIC	72.0
8	4.00	M	YES	BLACK	79.00
9	6.000	M	NO	WHITE	88.000
10	7.0000	M	YES	HISPANIC	87.0000

4.6 Suppress row and column names

```
> print((tli.table), include.colnames = FALSE, include.rownames = FALSE,
+     floating = FALSE)
```

6	M	YES	HISPANIC	43
7.0	M	NO	BLACK	88.0
5.00	F	YES	HISPANIC	34.00
3.000	M	YES	HISPANIC	65.000
8.0000	M	YES	WHITE	75.0000
5	M	NO	BLACK	74
8.0	F	YES	HISPANIC	72.0
4.00	M	YES	BLACK	79.00
6.000	M	NO	WHITE	88.000
7.0000	M	YES	HISPANIC	87.0000

4.7 Horizontal lines

```
> print(xtable(anova(glm.D93)), hline.after = c(1), floating = FALSE)
```

	Df	Deviance	Resid. Df	Resid. Dev
NULL			8	10.58
outcome	2	5.45	6	5.13
treatment	2	0.00	4	5.13

4.8 Table-level LaTeX

```
> print(xtable(anova(glm.D93)), size = "small", floating = FALSE)
```

	Df	Deviance	Resid. Df	Resid. Dev
NULL			8	10.58
outcome	2	5.45	6	5.13
treatment	2	0.00	4	5.13

4.9 Long tables

Remember to insert `\usepackage{longtable}` in your LaTeX preamble. See Table 4.

```
> x <- matrix(rnorm(1000), ncol = 10)
> x.big <- xtable(x, label = "tabbig", caption = "Example of longtable spanning several pa

> print(x.big, tabular.environment = "longtable", floating = FALSE)
```

	1	2	3	4	5	6	7	8	9	10
1	−1.05	0.19	0.94	1.22	−0.16	−0.82	0.35	−0.33	1.64	0.37
2	0.60	−0.09	−0.71	1.13	−0.53	−0.43	1.55	−0.61	−0.67	0.03
3	−0.91	0.10	1.60	0.17	0.29	1.36	0.07	0.12	−0.70	−0.83
4	0.12	−1.15	−1.72	−0.60	−0.50	2.21	−0.36	−0.91	−0.24	0.44
5	−1.30	0.29	−1.13	−1.61	−1.09	−1.71	−0.87	1.17	−0.00	0.09
6	0.63	−0.04	0.65	−0.23	−0.42	0.87	2.63	1.03	−1.70	−0.46
7	0.66	−1.92	−0.42	−0.18	−0.09	−1.01	0.11	0.38	−0.36	−0.61
8	−0.77	−0.41	−1.02	−0.68	0.37	−0.12	−2.30	−0.04	−0.41	1.03
9	−0.18	0.12	0.63	0.79	−0.57	−0.96	−0.08	0.95	−0.66	0.90
10	0.56	1.33	0.17	1.85	1.84	−0.15	−2.98	−2.37	−1.17	0.62
11	0.13	0.63	0.78	0.26	−0.53	0.08	−0.17	−0.66	−0.61	0.29
12	−2.60	−1.61	1.40	0.08	−1.90	0.56	0.60	−1.17	−0.04	−0.42
13	0.28	−1.86	0.85	0.00	−1.42	−0.74	3.64	−0.49	0.48	−1.10
14	1.62	0.75	−0.11	0.08	1.61	−1.01	0.74	0.72	−0.82	−0.80
15	1.99	−0.55	−0.64	1.29	−1.23	−1.89	−1.88	1.25	−0.91	−1.13
16	0.75	−1.19	−0.35	−1.41	1.41	−2.16	1.46	−1.72	−1.25	−0.73
17	0.37	1.25	−1.34	1.58	0.28	−0.40	0.66	0.05	2.12	0.62
18	−0.39	1.64	0.20	−1.81	−0.81	−1.32	0.13	0.40	0.29	0.18
19	−0.38	−0.11	0.28	0.78	0.07	−0.28	0.46	0.09	0.26	0.14
20	0.27	−1.56	−0.46	0.16	1.14	0.73	−0.21	1.61	−0.81	0.53
21	−0.25	−0.41	−2.90	−1.89	−0.52	0.09	−0.70	0.47	−1.41	1.92
22	−0.20	0.50	−0.99	−0.87	−0.81	−1.46	−0.08	1.55	0.01	−0.71
23	−1.55	1.51	0.32	−0.12	−0.05	−1.07	1.31	0.29	0.20	0.81
24	−1.01	0.69	0.08	−2.69	0.22	1.04	0.55	0.34	0.36	0.34
25	0.52	0.36	1.57	0.12	1.62	−0.14	−2.41	2.06	−1.77	2.09
26	1.31	−0.47	0.61	−0.43	−1.11	0.97	−0.02	0.88	−0.03	0.01
27	0.78	0.44	0.70	−0.67	−1.02	1.68	2.12	1.42	−1.85	1.05
28	−1.56	1.49	−0.25	0.33	−0.66	−2.46	0.33	−0.40	−0.13	0.11
29	0.55	0.67	−1.74	−0.05	−0.63	−1.03	0.42	−0.66	0.36	0.32
30	−0.45	−0.43	0.65	−0.82	2.14	0.49	1.12	0.98	0.39	0.43
31	0.18	1.47	0.24	−1.66	−0.08	0.09	0.55	−0.17	−0.22	1.93

32	1.41	1.61	−0.63	−0.12	−0.99	0.15	0.65	−0.90	−1.65	−1.13
33	−0.36	−0.58	1.69	1.37	−1.63	0.17	0.89	0.31	0.52	0.50
34	−0.03	0.35	0.88	−1.40	1.23	1.28	−0.93	−0.87	0.76	0.32
35	0.21	−0.18	−0.76	0.31	−0.36	−2.22	−0.58	−0.19	1.06	−0.03
36	−1.51	1.47	−1.10	−1.04	−0.54	−1.19	−1.53	−0.80	1.32	0.57
37	−0.34	0.58	0.06	0.73	−0.36	−1.84	0.63	1.25	−2.13	−1.24
38	−1.62	−1.01	−0.52	0.50	0.60	0.41	0.43	0.83	0.41	1.12
39	−0.37	1.25	−0.03	−0.47	0.97	−0.63	1.30	0.50	0.75	−0.82
40	−2.05	0.22	0.44	0.00	−1.82	−0.18	1.01	−0.73	−1.76	0.49
41	−0.30	0.37	−1.13	−0.42	0.18	−0.50	−0.93	−1.47	0.21	0.24
42	0.67	0.33	−0.95	1.50	0.45	−0.39	0.12	0.72	0.56	−2.08
43	−0.36	−0.08	−0.87	−0.83	−1.60	0.75	1.11	1.41	1.27	0.99
44	−1.42	1.43	−0.78	−0.23	1.03	0.29	1.25	0.90	−0.19	−0.78
45	−0.30	−1.00	−0.24	−1.03	−0.04	1.28	0.47	0.41	1.51	0.79
46	−0.34	−0.78	0.10	1.49	−1.27	0.56	0.45	0.05	0.17	0.66
47	0.28	0.52	−0.05	−0.04	−1.49	2.27	1.20	1.52	−0.37	0.94
48	0.44	0.68	−1.31	−0.58	−0.00	−1.47	−0.84	0.57	−0.87	−0.23
49	−1.04	−0.49	0.87	1.70	0.92	0.74	0.14	−1.17	0.56	−1.98
50	0.09	0.88	0.08	0.98	1.16	0.05	−1.31	0.99	−0.05	0.48
51	−0.23	0.83	1.23	−0.23	−1.47	0.93	−1.46	−1.01	0.31	−0.04
52	−1.57	−0.22	−0.01	−0.98	0.09	1.85	2.06	0.33	−0.53	−0.95
53	0.17	−0.86	−0.19	2.07	0.20	0.32	0.15	0.70	−0.57	−0.56
54	2.19	0.65	0.45	0.74	1.89	−1.24	−1.34	−0.17	−0.28	0.81
55	−0.11	2.33	−0.88	0.07	2.42	1.03	1.13	0.15	1.38	−0.96
56	−0.56	−0.36	−0.22	1.21	−0.58	0.49	1.32	−0.69	−1.82	0.69
57	−0.65	0.14	−2.53	−0.05	0.30	−0.35	0.90	−0.78	0.44	−0.77
58	0.70	−1.35	−1.28	−0.40	0.99	0.53	−1.93	−1.11	−0.61	−1.69
59	−0.03	−0.43	−0.83	2.91	0.56	0.21	−0.05	−1.90	0.34	0.15
60	−1.23	1.59	−0.14	0.89	0.91	−1.45	−0.77	−0.94	1.49	1.86
61	−0.92	−0.78	1.55	−0.16	1.73	−1.84	−0.64	0.40	−1.65	−0.18
62	1.11	0.76	−1.74	1.38	0.91	1.84	0.54	−0.39	−1.18	0.63
63	−1.12	0.16	−1.08	0.17	−1.38	−2.54	−0.77	−0.83	0.73	1.00
64	0.48	1.17	0.93	0.62	1.29	0.99	0.22	−1.39	−1.70	−0.10
65	0.99	2.52	−0.32	0.08	0.28	−1.07	2.03	0.11	0.36	0.41
66	−1.27	0.70	−1.09	0.17	0.44	−0.16	−1.30	−0.46	1.47	0.19
67	−0.14	0.74	−1.56	−0.68	0.07	0.91	0.24	0.66	−1.22	−1.69
68	−0.01	0.23	−0.10	−2.73	1.44	1.25	−0.15	1.33	0.05	0.23
69	0.80	0.56	0.49	0.22	2.65	0.41	−0.73	0.40	−0.40	−1.99
70	1.56	−0.86	−1.21	−0.31	−1.83	−0.73	−0.71	−0.10	0.88	−1.11
71	0.48	−1.03	1.73	0.95	−0.94	−1.12	−0.66	1.09	−1.19	1.42
72	0.00	−0.20	−0.06	0.23	0.19	0.23	0.26	−0.34	−0.22	−1.70
73	0.01	−0.40	0.34	0.62	−0.46	−0.86	−2.85	0.27	−0.10	0.11
74	0.29	−0.68	0.24	1.42	−1.43	1.60	−0.72	−0.42	−1.70	0.31
75	0.97	−1.63	−0.17	−1.13	−1.41	−0.28	−1.29	−0.05	0.55	0.17
76	−0.32	0.39	0.04	1.87	−0.97	−0.11	0.96	0.73	−1.83	0.27
77	0.33	−0.12	0.67	1.75	−0.50	0.00	0.12	−1.14	−0.65	−0.55
78	0.69	0.60	−1.17	0.69	1.33	0.37	0.60	−0.95	0.59	0.34
79	0.83	−0.25	1.43	−2.24	−0.02	−0.71	−1.16	1.72	0.27	−1.38
80	−0.37	−1.63	−0.98	0.35	0.24	−2.00	0.07	0.10	−1.24	−1.73
81	−0.66	−0.52	−0.89	−0.57	0.55	−0.90	0.54	0.17	−0.62	−0.85

82	−1.52	0.63	−1.32	−0.15	1.01	1.98	0.12	0.62	−0.93	0.17
83	0.19	−0.18	1.54	1.86	0.01	−0.56	−0.50	−2.51	0.75	0.29
84	−1.93	0.89	−1.70	0.99	−0.27	2.46	1.27	2.55	−1.39	−1.52
85	0.65	2.50	1.33	−2.09	−2.67	0.22	−1.08	0.68	1.12	0.04
86	−0.39	0.40	0.39	−1.04	−1.51	0.88	1.05	1.21	−0.42	1.50
87	0.55	0.13	−0.75	−1.03	−0.20	0.79	0.15	−0.26	−0.52	0.47
88	−0.58	0.90	−2.17	−0.94	1.18	−0.76	0.16	−1.95	−0.18	0.30
89	1.56	−0.17	−1.07	2.07	0.26	−2.47	0.41	1.24	0.18	−0.79
90	0.16	−0.29	−0.21	−0.32	−0.83	−0.76	1.13	0.88	0.16	1.59
91	−1.25	0.17	−0.29	−0.40	−0.22	1.11	1.90	0.45	1.58	0.68
92	−2.88	−1.39	−0.10	1.11	0.20	0.80	0.90	1.30	0.04	1.78
93	−0.36	0.55	−0.95	0.93	0.22	1.91	1.58	−0.37	1.29	−0.75
94	0.45	2.00	−1.37	−1.71	0.83	−0.61	−0.95	0.29	−1.59	0.59
95	0.18	−0.51	0.80	0.98	0.47	1.96	−0.21	1.84	0.22	2.72
96	0.76	−0.93	0.77	−0.42	−1.10	−1.10	2.23	−0.09	−0.26	0.28
97	0.36	0.05	−1.17	0.76	1.21	−0.36	−0.02	−0.47	1.42	0.22
98	1.11	−1.08	1.45	−0.63	0.25	−1.99	0.41	0.54	−0.90	0.26
99	0.80	0.50	−0.07	−0.70	0.51	0.43	−0.23	1.08	−1.08	−1.86
100	0.85	2.10	0.26	−0.41	−0.79	1.68	−1.49	1.54	1.43	1.91

Table 4: Example of longtable spanning several pages

4.10 Sideways tables

Remember to insert `\usepackage{rotating}` in your LaTeX preamble. Sideways tables can't be forced in place with the 'H' specifier, but you can use the `\clearpage` command to get them fairly nearby. See Table 5.

```
> x <- x[1:30, ]
> x.small <- xtable(x, label = "tabsmall", caption = "A sideways table")

> print(x.small, floating.environment = "sidewaystable")
```

	1	2	3	4	5	6	7	8	9	10
1	−1.05	0.19	0.94	1.22	−0.16	−0.82	0.35	−0.33	1.64	0.37
2	0.60	−0.09	−0.71	1.13	−0.53	−0.43	1.55	−0.61	−0.67	0.03
3	−0.91	0.10	1.60	0.17	0.29	1.36	0.07	0.12	−0.70	−0.83
4	0.12	−1.15	−1.72	−0.60	−0.50	2.21	−0.36	−0.91	−0.24	0.44
5	−1.30	0.29	−1.13	−1.61	−1.09	−1.71	−0.87	1.17	−0.00	0.09
6	0.63	−0.04	0.65	−0.23	−0.42	0.87	2.63	1.03	−1.70	−0.46
7	0.66	−1.92	−0.42	−0.18	−0.09	−1.01	0.11	0.38	−0.36	−0.61
8	−0.77	−0.41	−1.02	−0.68	0.37	−0.12	−2.30	−0.04	−0.41	1.03
9	−0.18	0.12	0.63	0.79	−0.57	−0.96	−0.08	0.95	−0.66	0.90
10	0.56	1.33	0.17	1.85	1.84	−0.15	−2.98	−2.37	−1.17	0.62
11	0.13	0.63	0.78	0.26	−0.53	0.08	−0.17	−0.66	−0.61	0.29
12	−2.60	−1.61	1.40	0.08	−1.90	0.56	0.60	−1.17	−0.04	−0.42
13	0.28	−1.86	0.85	0.00	−1.42	−0.74	3.64	−0.49	0.48	−1.10
14	1.62	0.75	−0.11	0.08	1.61	−1.01	0.74	0.72	−0.82	−0.80
15	1.99	−0.55	−0.64	1.29	−1.23	−1.89	−1.88	1.25	−0.91	−1.13
16	0.75	−1.19	−0.35	−1.41	1.41	−2.16	1.46	−1.72	−1.25	−0.73
17	0.37	1.25	−1.34	1.58	0.28	−0.40	0.66	0.05	2.12	0.62
18	−0.39	1.64	0.20	−1.81	−0.81	−1.32	0.13	0.40	0.29	0.18
19	−0.38	−0.11	0.28	0.78	0.07	−0.28	0.46	0.09	0.26	0.14
20	0.27	−1.56	−0.46	0.16	1.14	0.73	−0.21	1.61	−0.81	0.53
21	−0.25	−0.41	−2.90	−1.89	−0.52	0.09	−0.70	0.47	−1.41	1.92
22	−0.20	0.50	−0.99	−0.87	−0.81	−1.46	−0.08	1.55	0.01	−0.71
23	−1.55	1.51	0.32	−0.12	−0.05	−1.07	1.31	0.29	0.20	0.81
24	−1.01	0.69	0.08	−2.69	0.22	1.04	0.55	0.34	0.36	0.34
25	0.52	0.36	1.57	0.12	1.62	−0.14	−2.41	2.06	−1.77	2.09
26	1.31	−0.47	0.61	−0.43	−1.11	0.97	−0.02	0.88	−0.03	0.01
27	0.78	0.44	0.70	−0.67	−1.02	1.68	2.12	1.42	−1.85	1.05
28	−1.56	1.49	−0.25	0.33	−0.66	−2.46	0.33	−0.40	−0.13	0.11
29	0.55	0.67	−1.74	−0.05	−0.63	−1.03	0.42	−0.66	0.36	0.32
30	−0.45	−0.43	0.65	−0.82	2.14	0.49	1.12	0.98	0.39	0.43

Table 5: A sideways table

5 Acknowledgements

Most of the examples in this gallery are taken from the `xtable` documentation.

6 R Session information

```
> toLatex(sessionInfo())
```

- R version 2.4.1 (2006-12-18), `i686-pc-linux-gnu`
- Locale: `LC_CTYPE=en_US.UTF-8;LC_NUMERIC=C;LC_TIME=en_US.UTF-8;LC_COLLATE=en_US.UTF-8;LC_MONETARY=en_US.UTF-8;LC_MESSAGES=en_US.UTF-8;LC_PAPER=en_US.UTF-8;LC_NAME=C;LC_ADDRESS=C;LC_TELEPHONE=C;LC_MEASUREMENT=en_US.UTF-8;LC_IDENTIFICATION=C`
- Base packages: base, datasets, graphics, grDevices, methods, stats, tools, utils
- Other packages: xtable 1.4-3