The xtable gallery

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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	33.13	33.13	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	33.13	33.13	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	33.13	33.13	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							2	3	4	6	5	5
1955	5	5	6	5	5	4	5	6	6	7	8	11
1956	14	14	15	17	19	18	18	20	22	21	23	22
1957	22	22	22	24	24	26	25	26	28	30	31	30
1958	33	35	35	35	36	37	39	41	43	44	45	46
1959	47	49	50	50	49	51	53	54	55	57	57	59
1960	58	60	61	61	63	65	67	67	67	67	69	70
1961	73	75	76	75	76	76	76	78	78	81	82	84
1962	86	87	89	89	90	91	93	93	94	96		

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}

3.1 Markup in tables

Markup can be kept in tables, including column and row names by using a customized sanitize.text.function:

```
> mat <- round(matrix(c(0.9, 0.89, 200, 0.045, 2), c(1, 5)), 4)
> rownames(mat) <- "$y_{t-1}$"
> colnames(mat) <- c("$R^2$", "$\\bar{R}^2$", "F-stat", "S.E.E",
+     "DW")
> mat <- xtable(mat)
```

```
> print(mat, sanitize.text.function = function(x) {
+     x
+ })
```

	R^2	$\bar{R}^2$	F-stat	S.E.E	DW
y_{t-1}	0.90	0.89	200.00	0.04	2.00

4 Format examples

4.1 Adding a centering environment

```
> print(xtable(lm.D9, caption = "\\tt latex.environment=NULL"),
+     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 1: `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 2: `latex.environment=""`

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

4.2 Column alignment

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

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

> print(tli.table, 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

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

	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

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	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

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	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

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	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

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	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

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	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

4.4 Suppress row names

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

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

4.5 Suppress column names

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

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

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	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

4.6 Suppress row and column names

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

6	M	YES	HISPANIC	43
7	M	NO	BLACK	88
5	F	YES	HISPANIC	34
3	M	YES	HISPANIC	65
8	M	YES	WHITE	75
5	M	NO	BLACK	74
8	F	YES	HISPANIC	72
4	M	YES	BLACK	79
6	M	NO	WHITE	88
7	M	YES	HISPANIC	87

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	2.24	0.67	−0.12	0.13	−0.41	−0.64	0.69	−2.02	−0.25	−3.42
2	0.17	0.28	−1.06	−0.68	−0.01	0.97	1.52	0.47	1.24	−2.35
3	−1.56	−2.70	0.34	1.04	0.59	−1.37	−0.73	0.06	−0.05	1.48
4	−1.81	0.22	−1.81	−2.39	1.60	−0.56	−0.41	−0.24	0.10	0.34
5	−1.00	−0.79	0.79	0.16	−0.72	−0.46	−0.73	0.17	−0.54	0.45
6	−0.95	0.20	0.85	1.42	−1.75	0.21	−1.99	0.30	0.61	−1.11
7	1.67	1.41	−1.43	−0.23	2.19	0.66	1.42	0.17	1.36	0.10
8	−0.40	−0.09	−0.41	0.16	−0.01	0.91	−0.77	−0.21	−0.62	0.01
9	−0.42	−0.27	−0.93	2.15	1.04	−2.81	0.44	−0.34	0.85	0.05
10	1.59	−0.47	1.57	1.35	1.83	−0.14	0.39	1.48	0.55	1.12
11	−0.30	0.82	0.13	0.60	1.08	1.11	0.10	−0.61	−0.18	−1.21
12	−0.31	−0.78	1.48	0.72	−0.34	0.85	−1.19	0.09	0.68	0.66
13	0.19	0.72	−0.17	1.55	−1.44	−0.39	0.46	1.26	−1.19	−0.65
14	0.12	1.39	−0.54	−0.34	−0.14	−1.18	1.22	−0.39	−0.36	−0.20
15	−0.89	0.85	−1.23	0.22	−1.50	1.25	0.91	−0.76	0.17	−0.33
16	0.51	−0.43	−0.29	−0.37	−1.06	−0.36	−0.67	1.16	−2.42	−0.09
17	0.34	0.21	−0.34	0.07	0.74	−1.11	−1.01	2.12	1.21	−0.80
18	−0.44	−0.78	0.63	0.78	−1.84	1.50	0.95	−0.74	1.09	−0.95
19	−1.30	1.00	1.74	0.15	−0.19	0.32	1.85	−0.24	0.76	0.53
20	−0.35	1.80	0.74	0.21	0.03	2.94	−0.86	−1.11	−0.28	0.10
21	−0.44	0.23	−2.09	−0.13	0.18	0.66	−0.86	−1.02	−0.07	−1.22
22	2.66	−1.22	−1.40	1.62	−0.06	0.18	2.13	1.06	−0.44	2.51
23	−0.86	−0.32	−0.49	−0.83	−0.67	−0.71	0.37	−0.90	0.37	−0.42
24	−0.71	0.52	0.59	1.21	−0.19	0.93	−0.01	−0.14	−0.40	0.55
25	−1.07	1.17	0.64	−1.15	0.41	1.02	−0.35	−0.31	0.68	1.15
26	0.27	−1.26	−1.41	−0.68	−1.75	2.02	−0.84	0.70	0.73	−1.26
27	−0.77	−0.14	−1.43	1.27	0.43	0.65	−0.05	0.16	1.49	1.12
28	0.95	−0.13	0.60	0.16	0.08	−1.35	0.69	−1.05	−0.50	1.01
29	−0.39	−0.15	0.81	1.60	0.40	−0.27	0.18	0.42	1.24	−0.19
30	−0.31	0.50	−0.98	0.66	−1.02	1.99	−0.67	−2.19	−0.74	−0.67
31	0.96	−0.73	−0.08	0.62	0.47	−0.23	0.94	−1.01	−0.35	0.06
32	1.35	−0.83	−0.85	−0.97	−0.07	−0.39	0.62	−0.09	−1.92	1.47
33	0.24	0.81	−1.44	−0.13	0.14	1.04	0.22	−1.14	−1.33	−0.04
34	−0.41	2.21	0.66	0.44	−0.12	−0.11	−0.59	−0.48	−1.21	1.90
35	0.66	0.39	0.37	−1.02	−0.21	1.75	−0.46	−0.19	0.04	−1.07
36	1.68	1.90	−1.20	−0.39	−0.03	0.37	−0.94	−1.38	0.22	−0.45
37	−0.48	0.23	−1.94	−1.30	−0.43	0.56	0.15	−0.10	0.19	−0.35
38	0.46	−0.58	0.17	0.28	−0.31	−0.44	0.30	1.31	−1.04	−1.72
39	0.19	−0.54	−1.37	2.11	0.67	0.77	−0.17	−0.46	−1.39	0.49
40	−1.24	1.00	0.13	1.48	0.12	−0.65	−1.68	−0.79	−0.99	−1.38
41	0.93	0.47	0.01	−1.22	−0.01	−1.59	0.97	0.06	−0.86	0.06
42	0.31	−0.22	0.87	−1.08	0.82	−0.10	−1.13	1.18	0.47	−1.68
43	−0.09	−2.63	−0.10	1.28	−0.09	−0.20	0.47	0.07	−0.31	−0.83
44	−0.96	0.37	−0.77	−1.57	1.00	0.56	1.80	0.83	0.76	0.32
45	−0.78	−0.17	1.01	0.10	0.22	0.58	0.06	−2.20	1.07	0.22
46	−1.24	−0.17	0.10	0.99	0.37	0.48	1.25	0.06	1.22	2.69

47	0.66	−0.88	−1.19	0.43	0.50	1.92	1.52	0.55	−0.49	0.30
48	0.42	1.17	−0.34	3.14	0.56	−0.57	−0.38	1.53	−1.58	−1.35
49	0.41	1.47	0.56	−0.59	0.38	0.41	−0.32	−0.71	−0.84	−1.01
50	1.62	−0.69	−0.84	2.10	1.03	−0.79	0.97	−0.21	0.29	−0.57
51	−0.42	−1.24	0.30	−0.74	−0.29	0.08	0.89	1.38	−1.80	2.11
52	−1.23	1.16	0.06	2.46	−1.60	−0.50	0.65	0.81	−0.48	1.33
53	1.85	−1.19	1.58	−0.06	−0.08	0.33	0.74	−0.31	0.48	−0.29
54	2.37	1.54	0.10	1.14	−2.45	−0.20	−0.37	0.95	0.70	−1.45
55	−1.25	0.21	0.09	0.41	−0.10	−0.44	−0.28	0.67	0.55	−3.18
56	0.85	−0.89	−2.28	−0.07	−0.15	−0.76	0.78	−1.67	0.04	0.31
57	1.06	1.31	−0.48	−0.22	0.45	−0.06	1.06	0.22	−0.45	0.98
58	−1.40	−0.85	0.19	0.02	0.06	1.02	0.72	0.92	0.56	1.40
59	0.89	−0.65	−0.88	0.18	−1.33	3.46	0.55	−0.60	−0.59	−0.24
60	−0.62	0.79	0.64	−0.00	−0.18	0.79	−0.34	0.29	0.85	−0.65
61	−0.03	0.91	−1.16	0.77	−1.10	1.18	−0.37	0.73	−0.97	−1.03
62	0.08	−0.92	2.31	2.28	−0.58	0.10	0.85	−0.53	−0.14	−0.33
63	−2.20	−0.63	0.83	1.61	0.20	0.33	−1.47	−0.05	0.67	0.14
64	0.11	−0.03	0.11	−1.15	−1.48	−0.28	1.01	−1.06	0.39	−0.77
65	0.34	−0.33	0.78	−1.32	−0.11	0.49	0.25	−1.48	−0.18	−0.40
66	0.28	−0.33	−1.61	0.51	−0.01	0.18	−0.67	0.73	1.29	−0.36
67	1.06	−0.72	−0.35	−0.71	−1.01	−0.49	0.18	−1.12	0.58	1.33
68	−1.25	−1.82	−0.23	0.08	−0.57	−1.63	1.14	−0.00	0.29	2.84
69	−0.33	0.25	0.42	−0.29	−0.11	−0.63	0.56	0.63	0.26	0.70
70	0.06	0.39	−0.09	−0.15	0.32	1.64	−0.45	0.79	0.38	−0.59
71	0.20	0.77	0.92	−0.37	0.89	−1.00	−1.45	0.93	−2.09	−0.32
72	−0.37	1.24	−0.93	0.21	−0.61	−0.95	−1.47	−1.27	−0.72	0.86
73	−0.83	−0.57	−0.21	−0.74	0.53	0.41	1.34	−0.87	0.46	0.52
74	−0.18	1.82	0.59	0.23	0.22	−0.22	1.30	0.19	1.93	0.56
75	0.30	0.38	−0.75	0.77	−0.05	0.91	−0.26	0.08	−1.58	0.17
76	2.04	0.20	−1.73	1.14	−1.29	1.34	−1.68	−0.54	1.00	−0.58
77	0.27	0.29	1.36	1.20	−0.10	−0.32	0.13	1.53	1.60	−1.47
78	1.15	1.06	0.29	−1.21	−0.41	0.87	0.98	−1.05	0.24	2.31
79	−0.03	−0.61	0.35	0.99	0.66	−2.66	1.30	1.36	0.14	0.31
80	2.22	−1.71	−1.85	0.26	0.42	−0.96	1.72	−1.25	1.69	0.83
81	1.38	−0.64	−1.65	1.08	−0.22	−0.74	−0.69	2.15	−0.73	−1.68
82	−0.25	0.92	1.61	0.10	−1.90	−0.37	0.36	1.84	1.89	0.19
83	−0.16	−1.54	−2.31	0.86	0.24	−1.61	−1.11	−0.62	1.50	−0.29
84	0.42	1.26	0.50	0.32	−0.15	0.10	1.21	1.39	−0.48	−1.05
85	1.53	1.06	0.69	1.22	−1.26	0.34	−0.46	0.15	−0.60	0.25
86	−0.78	0.23	0.58	−0.73	0.59	−0.62	−1.19	−0.16	1.25	−1.97
87	−1.79	1.10	−0.00	0.90	0.11	−0.86	−0.42	0.94	1.91	0.40
88	1.25	−0.76	−0.15	1.92	−1.25	0.87	−0.49	−0.53	−0.12	0.45
89	0.94	−2.19	−2.25	−1.40	−0.51	0.15	−0.39	−1.03	−2.17	−1.13
90	0.60	0.88	−2.61	−0.46	−0.51	0.82	0.54	0.60	0.59	−1.05
91	0.49	1.17	−0.40	−0.03	2.67	−0.03	0.07	−0.75	0.29	−1.23
92	0.11	−0.32	0.25	−1.41	−0.52	1.19	0.29	−0.44	−1.04	−2.67
93	−1.14	−0.80	−1.09	0.60	−0.03	1.47	−1.43	−0.21	−0.37	1.69
94	−0.75	0.31	0.01	−1.89	−0.05	−0.53	0.49	−0.22	2.26	−0.30
95	0.28	0.28	0.21	−0.19	−0.46	−0.92	0.78	1.33	1.08	1.19
96	0.15	0.89	−0.64	−1.60	0.01	0.74	−0.50	−0.70	−1.73	1.30

97	−0.85	−0.46	1.24	2.13	1.19	0.73	−1.27	0.76	−1.95	−1.64
98	−2.01	0.77	−1.14	−0.39	1.27	0.29	−2.04	1.06	−0.68	−1.47
99	−0.07	0.38	1.21	0.20	1.26	1.46	0.64	1.16	−1.70	−0.26
100	0.22	0.46	0.62	1.01	−0.06	−0.55	0.25	−0.39	−0.15	0.55

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	2.24	0.67	−0.12	0.13	−0.41	−0.64	0.69	−2.02	−0.25	−3.42
2	0.17	0.28	−1.06	−0.68	−0.01	0.97	1.52	0.47	1.24	−2.35
3	−1.56	−2.70	0.34	1.04	0.59	−1.37	−0.73	0.06	−0.05	1.48
4	−1.81	0.22	−1.81	−2.39	1.60	−0.56	−0.41	−0.24	0.10	0.34
5	−1.00	−0.79	0.79	0.16	−0.72	−0.46	−0.73	0.17	−0.54	0.45
6	−0.95	0.20	0.85	1.42	−1.75	0.21	−1.99	0.30	0.61	−1.11
7	1.67	1.41	−1.43	−0.23	2.19	0.66	1.42	0.17	1.36	0.10
8	−0.40	−0.09	−0.41	0.16	−0.01	0.91	−0.77	−0.21	−0.62	0.01
9	−0.42	−0.27	−0.93	2.15	1.04	−2.81	0.44	−0.34	0.85	0.05
10	1.59	−0.47	1.57	1.35	1.83	−0.14	0.39	1.48	0.55	1.12
11	−0.30	0.82	0.13	0.60	1.08	1.11	0.10	−0.61	−0.18	−1.21
12	−0.31	−0.78	1.48	0.72	−0.34	0.85	−1.19	0.09	0.68	0.66
13	0.19	0.72	−0.17	1.55	−1.44	−0.39	0.46	1.26	−1.19	−0.65
14	0.12	1.39	−0.54	−0.34	−0.14	−1.18	1.22	−0.39	−0.36	−0.20
15	−0.89	0.85	−1.23	0.22	−1.50	1.25	0.91	−0.76	0.17	−0.33
16	0.51	−0.43	−0.29	−0.37	−1.06	−0.36	−0.67	1.16	−2.42	−0.09
17	0.34	0.21	−0.34	0.07	0.74	−1.11	−1.01	2.12	1.21	−0.80
18	−0.44	−0.78	0.63	0.78	−1.84	1.50	0.95	−0.74	1.09	−0.95
19	−1.30	1.00	1.74	0.15	−0.19	0.32	1.85	−0.24	0.76	0.53
20	−0.35	1.80	0.74	0.21	0.03	2.94	−0.86	−1.11	−0.28	0.10
21	−0.44	0.23	−2.09	−0.13	0.18	0.66	−0.86	−1.02	−0.07	−1.22
22	2.66	−1.22	−1.40	1.62	−0.06	0.18	2.13	1.06	−0.44	2.51
23	−0.86	−0.32	−0.49	−0.83	−0.67	−0.71	0.37	−0.90	0.37	−0.42
24	−0.71	0.52	0.59	1.21	−0.19	0.93	−0.01	−0.14	−0.40	0.55
25	−1.07	1.17	0.64	−1.15	0.41	1.02	−0.35	−0.31	0.68	1.15
26	0.27	−1.26	−1.41	−0.68	−1.75	2.02	−0.84	0.70	0.73	−1.26
27	−0.77	−0.14	−1.43	1.27	0.43	0.65	−0.05	0.16	1.49	1.12
28	0.95	−0.13	0.60	0.16	0.08	−1.35	0.69	−1.05	−0.50	1.01
29	−0.39	−0.15	0.81	1.60	0.40	−0.27	0.18	0.42	1.24	−0.19
30	−0.31	0.50	−0.98	0.66	−1.02	1.99	−0.67	−2.19	−0.74	−0.67

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 2.5.0 (2007-04-23), `x86_64-unknown-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 1.4-6