

## 5 Selected Tables packages with sample code

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# tableSample

Code ▼

*rTables-Group*

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## 5 Selected Tables packages with sample code

As a proof of concept, below is the List of 5 Table packages we considered today:

### 1: Arsenal

An Arsenal of 'R' functions for large-scale statistical summaries, which are streamlined to work within the latest reporting tools in 'R' and 'RStudio' and which use formulas and versatile summary statistics for summary tables and model.

Documentation (<https://www.rdocumentation.org/packages/arsenal/versions/0.2.0>)

### Example

Code

```
##
## -----
##
##              A: IFL (N=428)      F: FOLFOX (N=691)      G: IROX (N=380)
## Total (N=1499)      p value
## -----
## SEX
##              0.190
##      Male          277 (64.7%)      411 (59.5%)      228 (60%)      9
##      16 (61.1%)
##      Female        151 (35.3%)      280 (40.5%)      152 (40%)      5
##      83 (38.9%)
## Age, yrs
##              0.614
##      Mean (SD)      59.7 (11.4)      60.3 (11.6)      59.8 (11.5)      6
##      0 (11.5)
##      Q1, Q3          53, 68          52, 69          52, 68          5
##      2, 68
##      Range          27 - 88          19 - 88          26 - 85          1
##      9 - 88
## -----
## -----
```

Code

```
##
##
## arm      sex      mdquality.s      Freq      cumFreq      freqPercent      cumPercent
## -----
## A: IFL    Male      0              29         29           1.93           1.93
##           1              214        243          14.28          16.21
##           NA             34         277           2.27           18.48
##           Female    0              12         289           0.80           19.28
##           1              118        407           7.87           27.15
##           NA             21         428           1.40           28.55
## F: FOLFOX Male      0              31         459           2.07           30.62
##           1              285        744          19.01          49.63
##           NA             95         839           6.34           55.97
##           Female    0              21         860           1.40           57.37
##           1              198       1058          13.21          70.58
##           NA             61        1119           4.07           74.65
## G: IROX    Male      0              17        1136           1.13           75.78
##           1              187       1323          12.47          88.26
##           NA             24        1347           1.60           89.86
##           Female    0              14        1361           0.93           90.79
##           1              121       1482           8.07           98.87
##           NA             17        1499           1.13          100.00
```

## 2: condformat

Prints a data frame with cells formatted according to several rules or criteria. It is integrated with the RStudio Viewer or a web browser, and it supports knitr and markdown outputs using both HTML and PDF output formats.

Documentation (<https://cran.r-project.org/web/packages/condformat/vignettes/introduction.html>)

## Example

[Code](#)

	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	5.1	3.5	1.4	0.2	setosa
2	4.9	3.0	1.4	0.2	setosa
3	4.7	3.2	1.3	0.2	setosa
4	4.6	3.1	1.5	0.2	setosa
5	5.0	3.6	1.4	0.2	setosa
6	5.6	2.5	3.9	1.1	versicolor
7	5.9	3.2	4.8	1.8	versicolor
8	6.1	2.8	4.0	1.3	versicolor
9	6.3	2.5	4.9	1.5	versicolor
10	6.1	2.8	4.7	1.2	versicolor
11	6.4	2.9	4.3	1.3	versicolor
12	6.0	2.2	5.0	1.5	virginica
13	6.9	3.2	5.7	2.3	virginica
14	5.6	2.8	4.9	2.0	virginica
15	7.7	2.8	6.7	2.0	virginica
16	6.3	2.7	4.9	1.8	virginica
17	6.7	3.3	5.7	2.1	virginica

## 3: desctable

A comprehensive descriptive and comparative tables generator for R.

Documentation (<https://cran.r-project.org/web/packages/desctable/vignettes/desctable.html>)

## Example

[Code](#)

```
##              N      Mean/%      sd  Med IQR
## 1      Sepal.Length 150          NA      NA 5.80 1.3
## 2      Sepal.Width 150  3.057333 0.4358663  NA  NA
## 3      Petal.Length 150          NA      NA 4.35 3.5
## 4      Petal.Width 150          NA      NA 1.30 1.5
## 5      Species     150          NA      NA  NA  NA
## 6 Species: setosa   50 33.333333      NA  NA  NA
## 7 Species: versicolor 50 33.333333      NA  NA  NA
## 8 Species: virginica 50 33.333333      NA  NA  NA
```

[Code](#)[Copy](#)[Excel](#)

	N	Mean	sd	Med	IQR
mpg	32	20	6		
cyl	32			6	4
dis	32			196	205

	<b>N</b>	<b>Mean</b>	<b>sd</b>	<b>Med</b>	<b>IQR</b>
hp	32			123	84
drat	32	3.6	0.53		
wt	32			3.3	1
qsec	32	18	1.8		
vs	32			0	1
am	32			0	1
gear	32			4	1
carb	32			2	2

## 4: expss

Provides tabulation functions with support of SPSS-style labels, multiple / nested banners, weights and multiple-response variables.

Documentation (<https://cran.r-project.org/web/packages/expss/vignettes/TablesWithLabelsInR.html>)

### Example

Code

Table with multiple banners (column %).

	<b>#Total</b>	<b>Transmission</b>		<b>Engine</b>	
		<b>Automatic</b>	<b>Manual</b>	<b>V-engine</b>	<b>Straight engine</b>
<b>Number of cylinders</b>					
4	34.4	15.8	61.5	5.6	71.4
6	21.9	21.1	23.1	16.7	28.6
8	43.8	63.2	15.4	77.8	
#Total cases	32	19	13	18	14

## 5: formattable

Designed for applying formatting on vectors and data frames to make data presentation easier, richer, more flexible and hopefully convey more information.

Documentation (<https://cran.r-project.org/web/packages/formattable/vignettes/introduction.html>)

### Example

Code

```
## [1] 10.00% 2.00% 3.00% 12.00%
```

Code

```
## [1] 15.00% 7.00% 8.00% 17.00%
```

## 6: kableExtra

Designed to help build common complex tables and manipulate table style. Comes with hoverable html tables, multi-column header and footnotes capabilities.

Documentation ([https://cran.r-project.org/web/packages/kableExtra/vignettes/awesome\\_table\\_in\\_html.html](https://cran.r-project.org/web/packages/kableExtra/vignettes/awesome_table_in_html.html))

### Example

[Code](#)

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

[Code](#)

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

[Code](#)

	Group 1		Group 2		Group 3	
	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

[Code](#)

	Group 1 <sup>†</sup>			Group 2 <sup>‡</sup>		
	mpg	cyl	displacement	hp	drat	wt
Mazda RX4	21.0	6	160	110	3.90	2.620
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875
Datsun 710	22.8	4	108	93	3.85	2.320
Hornet 4 Drive	21.4	6	258	110	3.08	3.215
Hornet Sportabout	18.7	8	360	175	3.15	3.440

\* This table is from mtcars

<sup>†</sup> Group 1 contains mpg, cyl and disp

<sup>‡</sup> Group 2 contains hp, drat and wt

## 7: tableby

Provides similar functionality as the SAS macros %table and %summary.

Documentation (<https://cran.r-project.org/web/packages/arsenal/vignettes/tableby.html>)

### Example

[Code](#)

```
##
## -----
##
##              A: IFL (N=428)      F: FOLFOX (N=691)      G: IROX (N=380)
## Total (N=1499)      p value
## -----
## Sex
##              0.190
## Male              277 (64.7%)      411 (59.5%)      228 (60%)      9
## 16 (61.1%)
## Female            151 (35.3%)      280 (40.5%)      152 (40%)      5
## 83 (38.9%)
## Age in Years
##              0.614
## Mean (SD)          59.7 (11.4)      60.3 (11.6)      59.8 (11.5)      6
## 0 (11.5)
## Q1, Q3              53, 68          52, 69          52, 68          5
## 2, 68
## Range              27 - 88          19 - 88          26 - 85          1
## 9 - 88
## -----
## -----
```

## 8: Huxtable

A package for creating HTML and LaTeX tables. It provides similar functionality to xtable, but more, with a simpler interface.

Documentation (<https://hughjonesd.github.io/huxtable/>)

### Example

Code

	rating	complaints	privileges	learning	raises	critical	advance
rating	1.00	0.83	0.43	0.62	0.59	0.16	0.16
complaints	0.83	1.00	0.56	0.60	0.67	0.19	0.22
privileges	0.43	0.56	1.00	0.49	0.45	0.15	0.34
learning	0.62	0.60	0.49	1.00	0.64	0.12	0.53
raises	0.59	0.67	0.45	0.64	1.00	0.38	0.57
critical	0.16	0.19	0.15	0.12	0.38	1.00	0.28
advance	0.16	0.22	0.34	0.53	0.57	0.28	1.00

## 9: Others

List of tabling packages to be considered later

1. `ascii` (<https://cran.r-project.org/web/packages/ascii/index.html>)
2. `ezsummary` (<https://cran.r-project.org/web/packages/ezsummary/index.html>) (<https://cran.r-project.org/web/packages/ezsummary/README.html>) (<https://cran.r-project.org/web/packages/ezsummary/README.html>)
3. `gmodels::CrossTable()` (<https://www.rdocumentation.org/packages/gmodels/versions/2.16.2/topics/CrossTable>)
4. `Gtable` with `grid.draw`, `grid.table` and `tableGrob` (<https://cran.r-project.org/web/packages/gridExtra/vignettes/tableGrob.html>)
5. `Hmisc::latex` (<https://www.rdocumentation.org/packages/Hmisc/versions/4.0-3>)
6. `htmlTable` (<https://cran.r-project.org/web/packages/htmlTable/vignettes/tables.html>)
7. `janitor` (<https://cran.r-project.org/web/packages/janitor/vignettes/introduction.html>)
8. `kable` (<https://www.rdocumentation.org/packages/knitr/versions/1.16/topics/kable>)
9. `pander` (<https://www.r-project.org/nosvn/pandoc/pander.html>)
10. `pixiedust` (<https://cran.r-project.org/web/packages/pixiedust/vignettes/advancedMagic.html>)
11. `ReporteRs` (<http://www.sthda.com/english/wiki/create-and-format-word-documents-using-r-software-and-reporters-package>)
12. `stargazer` (<https://www.r-statistics.com/2013/01/stargazer-package-for-beautiful-latex-tables-from-r-statistical-models-output/>)
13. `Tableone` (<https://cran.r-project.org/web/packages/tableone/vignettes/introduction.html>)
14. `tables` (<http://www.cyclismo.org/tutorial/R/tables.html>)
15. `Tabular` (<https://cran.r-project.org/web/packages/tables/vignettes/tables.pdf>)
16. `tangram` (<https://github.com/spgarbet/tangram/blob/master/vignettes/example.Rmd>)
17. `texreg` (<https://diffuseprior.wordpress.com/2013/01/20/texreg-a-package-for-beautiful-and-easily-customizable-latex-regression-tables-from-r/>)
18. `xtable` (<https://cran.r-project.org/web/packages/xtable/vignettes/OtherPackagesGallery.pdf>)
19. `Ztable` (<https://cran.r-project.org/web/packages/ztable/vignettes/ztable.html>)

