

# W8 Examples

*Till Krenz*

*12/4/2019*

```
library(tidyverse)
```

```
data(mtcars)
```

We can include R code inline as well like this: The average amount of cylinders of the cars in the mtcars dataset is 6.1875.

## Nice Tables

Now let's create some better looking tables. The following looks good in RStudio, but after rendering not that much.

```
head(mtcars)
```

```
##           mpg cyl  disp  hp drat   wt  qsec vs am gear carb
## Mazda RX4      21.0   6  160  110 3.90 2.620 16.46  0  1    4    4
## Mazda RX4 Wag  21.0   6  160  110 3.90 2.875 17.02  0  1    4    4
## Datsun 710     22.8   4  108   93 3.85 2.320 18.61  1  1    4    1
## Hornet 4 Drive  21.4   6  258  110 3.08 3.215 19.44  1  0    3    1
## Hornet Sportabout 18.7   8  360  175 3.15 3.440 17.02  0  0    3    2
## Valiant        18.1   6  225  105 2.76 3.460 20.22  1  0    3    1
```

knitr::kable() creates an actual table in the target format (In RStudio it doesn't look that nice though!)

```
knitr::kable(head(mtcars))
```

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.460	20.22	1	0	3	1

The kableExtra package allows us to manipulate the output tables in detail:

```
library(kableExtra)
```

```
knitr::kable(head(mtcars)) %>%
  kable_styling(bootstrap_options = c("striped", "hover", "condensed", "responsive")) %>%
  row_spec(0, angle = -45)
```

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225	105	2.76	3.460	20.22	1	0	3	1

## Regression Tables

```
mod1 <- lm(mpg ~ cyl + vs + gear, data = mtcars)
mod2 <- lm(mpg ~ cyl + vs + gear + hp + disp, data = mtcars)
```

with sjPlot:

```
library(sjPlot)
tab_model(mod1, mod2)
```

mpg

mpg

Predictors

Estimates

CI

p

Estimates

CI

p

(Intercept)

35.93

20.78 – 51.08

<0.001

28.02

10.62 – 45.41

0.004

cyl

-2.87

-4.21 – -1.52

<0.001

-0.92

```

-2.97 - 1.12
0.385
vs
-0.47
-4.71 - 3.77
0.830
-0.20
-4.22 - 3.83
0.924
gear
0.57
-1.38 - 2.52
0.571
1.38
-1.21 - 3.97
0.307
hp
-0.03
-0.07 - 0.01
0.150
disp
-0.01
-0.04 - 0.01
0.333
Observations
32
32
R2 / R2 adjusted
0.731 / 0.703
0.779 / 0.737
with stargazer:

```

```

library(stargazer)
stargazer(mod1, mod2)

```

```

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu
% Date and time: Wed, Dec 04, 2019 - 00:57:38

```

Table 2:

	<i>Dependent variable:</i>	
	mpg	
	(1)	(2)
cyl	−2.867*** (0.686)	−0.923 (1.044)
vs	−0.468 (2.163)	−0.198 (2.053)
gear	0.570 (0.994)	1.377 (1.322)
hp		−0.030 (0.020)
disp		−0.012 (0.012)
Constant	35.930*** (7.728)	28.016*** (8.877)
Observations	32	32
R <sup>2</sup>	0.731	0.779
Adjusted R <sup>2</sup>	0.703	0.737
Residual Std. Error	3.286 (df = 28)	3.092 (df = 26)
F Statistic	25.421*** (df = 3; 28)	18.358*** (df = 5; 26)

*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01