

Reproducible Research with Table Data

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```
require(moonBook)
require(rrtable)
require(ggplot2)
```

sampleData2

```
df2flectable( sampleData2 ,vanilla= FALSE )
```

type	title	code
title	title	Reproducible Research with Table Data
author	author	Keon-Woong Moon
data	sampleData2	sampleData2
mytable	mytable	mytable(sex~.,data=acs)
data	head(iris)	head(iris)
plot	plot	plot(iris)
ggplot	ggplot	ggplot(iris,aes(x=Sepal.Length,y=Sepal.Width,color=Species))+geom_point()
Rcode	Regression Analysis	fit=lm(mpg~wt*hp,data=mtcars) summary(fit)
Rcode	Summary	summary(mtcars)
text	Text	This document is an example of reproducible research using webr package. The home page of this project is github.com/keonwoongmoon/webr .
table	table	df2flectable(head(mtcars))
2ggplots	Two ggplots	ggplot(iris,aes(Sepal.Length,Sepal.Width))+geom_point() ggplot(iris,aes(Sepal.Length,Sepal.Width,colour=Species)) + geom_point() + guides(colour=FALSE)
2plots	Two plots	hist(mnorm(1000)) plot(1:10)

mytable

```
mytable2flectable( mytable(sex~.,data=acs) ,vanilla= FALSE )
```

sex	Female (N=287)	Male (N=570)	p
age	68.7 ± 10.7	60.6 ± 11.2	< 0.001
cardiogenicShock			
- No	275 (95.8%)	530 (93.0%)	0.136
- Yes	12 (4.2%)	40 (7.0%)	
entry			
- Femoral	119 (41.5%)	193 (33.9%)	0.035
- Radial	168 (58.5%)	377 (66.1%)	
Dx			
- NSTEMI	50 (17.4%)	103 (18.1%)	0.012
- STEMI	84 (29.3%)	220 (38.6%)	
- Unstable Angina	153 (53.3%)	247 (43.3%)	
EF	56.3 ± 10.1	55.6 ± 9.4	0.387
height	153.8 ± 6.2	167.9 ± 6.1	< 0.001
weight	57.2 ± 9.3	68.7 ± 10.3	< 0.001
BMI	24.2 ± 3.6	24.3 ± 3.2	0.611
obesity			
- No	194 (67.6%)	373 (65.4%)	0.580
- Yes	93 (32.4%)	197 (34.6%)	
TC	188.9 ± 51.1	183.3 ± 45.9	0.124
LDLC	117.8 ± 41.2	116.0 ± 41.1	0.561
HDLC	39.0 ± 11.5	37.8 ± 10.9	0.145
TG	119.9 ± 76.2	127.9 ± 97.3	0.195
DM			
- No	173 (60.3%)	380 (66.7%)	0.077
- Yes	114 (39.7%)	190 (33.3%)	
HBP			
- No	83 (28.9%)	273 (47.9%)	< 0.001
- Yes	204 (71.1%)	297 (52.1%)	
smoking			
- Ex-smoker	49 (17.1%)	155 (27.2%)	< 0.001
- Never	209 (72.8%)	123 (21.6%)	
- Smoker	29 (10.1%)	292 (51.2%)	

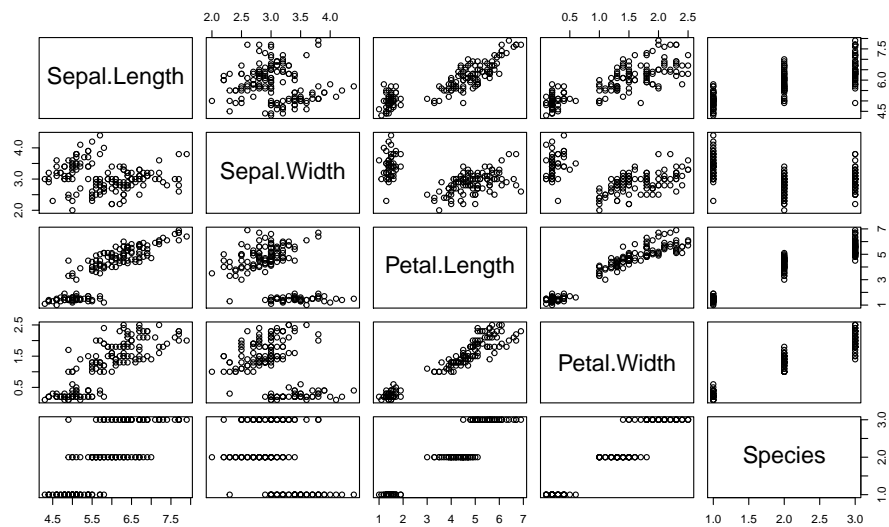
head(iris)

```
df2flectable( head(iris) ,vanilla= FALSE )
```

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
4.60	3.10	1.50	0.20	setosa
5.00	3.60	1.40	0.20	setosa
5.40	3.90	1.70	0.40	setosa

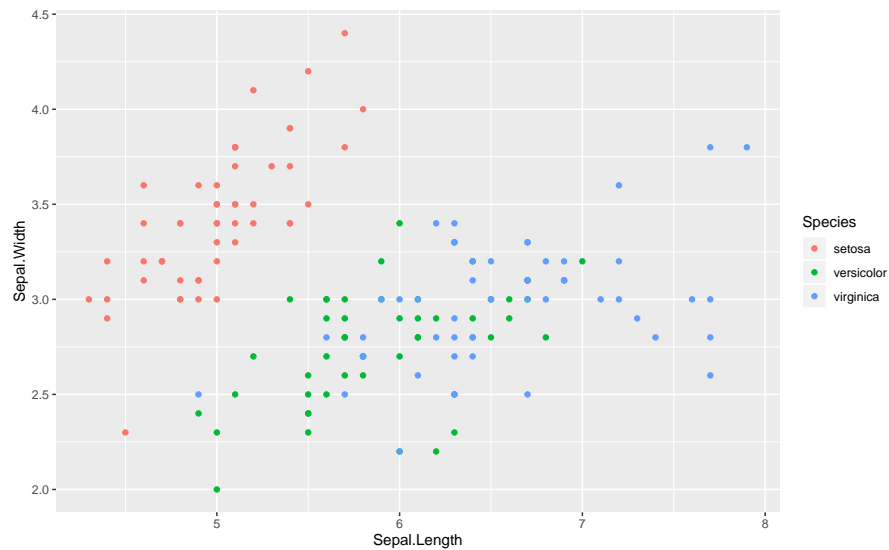
plot

```
plot(iris)
```



ggplot

```
ggplot(iris,aes(x=Sepal.Length,y=Sepal.Width,color=Species))+geom_point()
```



Regression Analysis

```
fit=lm(mpg~wt*hp,data=mtcars)
summary(fit)
```

Call:

```
lm(formula = mpg ~ wt * hp, data = mtcars)
```

Residuals:

Min	1Q	Median	3Q	Max
-3.0632	-1.6491	-0.7362	1.4211	4.5513

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	49.80842	3.60516	13.816	5.01e-14 ***
wt	-8.21662	1.26971	-6.471	5.20e-07 ***
hp	-0.12010	0.02470	-4.863	4.04e-05 ***
wt:hp	0.02785	0.00742	3.753	0.000811 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.153 on 28 degrees of freedom

Multiple R-squared: 0.8848, Adjusted R-squared: 0.8724

F-statistic: 71.66 on 3 and 28 DF, p-value: 2.981e-13

Summary

```
summary(mtcars)
```

mpg	cyl	disp	hp	drat
Min. :10.40	Min. :4.000	Min. : 71.1	Min. : 52.0	Min. :2.760
1st Qu.:15.43	1st Qu.:4.000	1st Qu.:120.8	1st Qu.: 96.5	1st Qu.:3.080
Median :19.20	Median :6.000	Median :196.3	Median :123.0	Median :3.695

```

Mean   :20.09   Mean   :6.188   Mean   :230.7   Mean   :146.7   Mean   :3.597
3rd Qu.:22.80   3rd Qu.:8.000   3rd Qu.:326.0   3rd Qu.:180.0   3rd Qu.:3.920
Max.   :33.90   Max.    :8.000   Max.    :472.0   Max.    :335.0   Max.    :4.930

  wt      qsec      vs      am      gear
Min.   :1.513   Min.   :14.50   Min.   :0.0000   Min.   :0.0000   Min.   :3.000
1st Qu.:2.581   1st Qu.:16.89   1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:3.000
Median :3.325   Median :17.71   Median :0.0000   Median :0.0000   Median :4.000
Mean   :3.217   Mean   :17.85   Mean   :0.4375   Mean   :0.4062   Mean   :3.688
3rd Qu.:3.610   3rd Qu.:18.90   3rd Qu.:1.0000   3rd Qu.:1.0000   3rd Qu.:4.000
Max.   :5.424   Max.   :22.90   Max.   :1.0000   Max.   :1.0000   Max.   :5.000

  carb
Min.   :1.000
1st Qu.:2.000
Median :2.000
Mean   :2.812
3rd Qu.:4.000
Max.   :8.000

```

Text

This document is an example of reproducible research using webr package. The home page of this project is github.com/cardiomoon/webr.

table

```
df2flextable(head(mtcars))
```

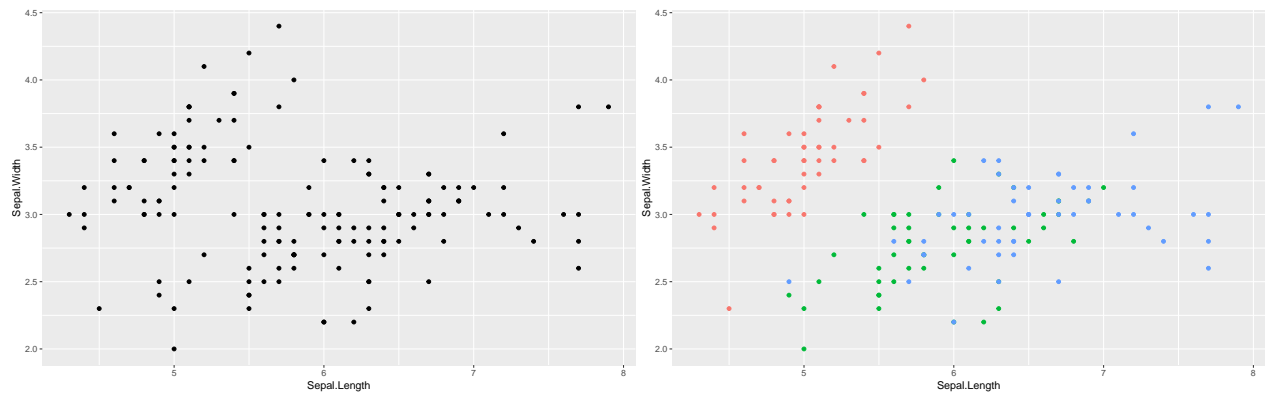
mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
21.00	6.00	160.00	110.00	3.90	2.62	16.46	0.00	1.00	4.00	4.00
21.00	6.00	160.00	110.00	3.90	2.88	17.02	0.00	1.00	4.00	4.00
22.80	4.00	108.00	93.00	3.85	2.32	18.61	1.00	1.00	4.00	1.00
21.40	6.00	258.00	110.00	3.08	3.21	19.44	1.00	0.00	3.00	1.00
18.70	8.00	360.00	175.00	3.15	3.44	17.02	0.00	0.00	3.00	2.00
18.10	6.00	225.00	105.00	2.76	3.46	20.22	1.00	0.00	3.00	1.00

Two ggplots

```

ggplot(iris,aes(Sepal.Length,Sepal.Width))+geom_point()
ggplot(iris,aes(Sepal.Length,Sepal.Width,colour=Species)) + geom_point() + guides(colour=FALSE)

```



Two plots

```
hist(rnorm(1000))
plot(1:10)
```

