Reproducible Research with Table Data

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2021-11-17 09:52:09

```
require(moonBook)
require(rrtable)
require(ggplot2)
require(webrSub)
require(ggthemes)
```

sampleData2

```
df2flextable2( 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 rrtable package. The home page of this project is github.com/cardiomoon/rrtable.
table	table	df2flextable(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(rnorm(1000)) plot(1:10)

mytable

```
mytable2flextable( 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%)	
- Never	209 (72.8%)	123 (21.6%)	

sex	Female (N=287)	Male (N=570)	< 0.001
- Smoker	29 (10.1%)	292 (51.2%)	

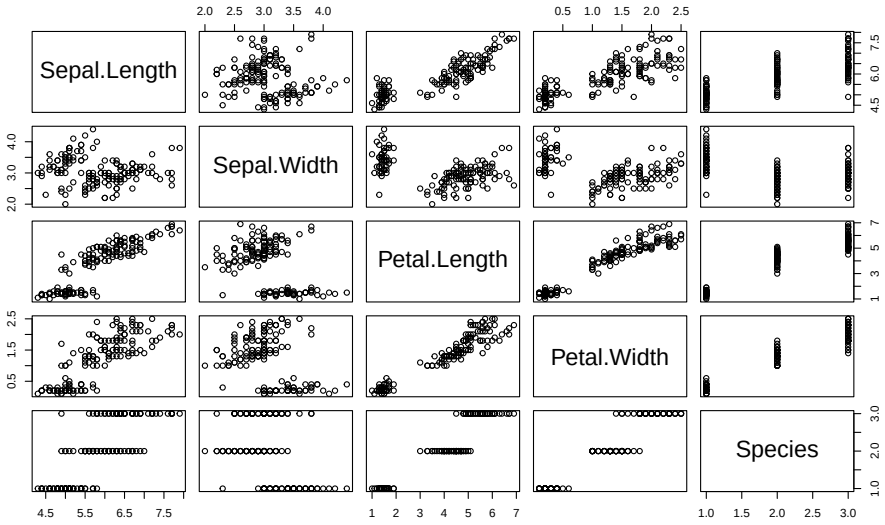
head(iris)

```
df2flextable2( head(iris) ,vanilla= FALSE )
```

Sepal.Lengt	Sepal.Widtl	Petal.Lengt	Petal.Widtl	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

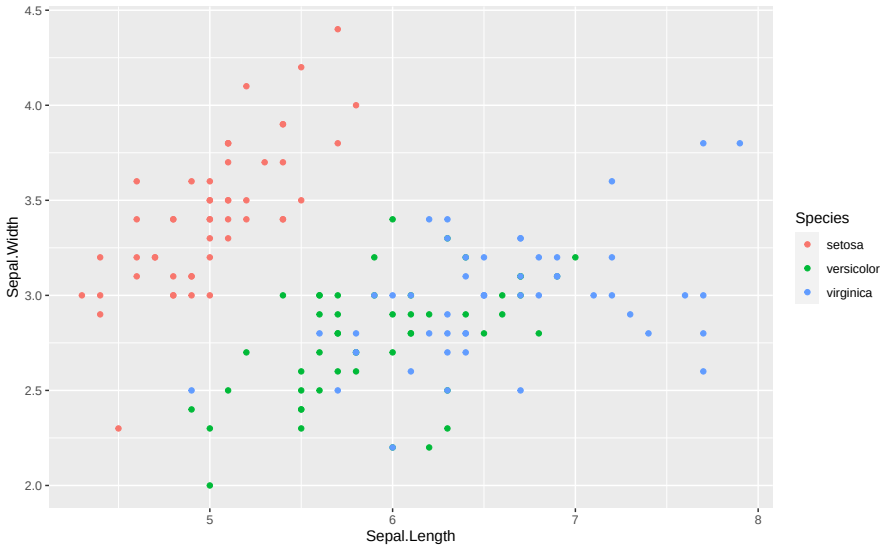
plot

```
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             wt             qs
 Min.   :10.40   Min.   :4.000   Min.   : 71.1   Min.   : 52.0   Min.   :2.760   Min.   :1.513   Min.
 1st Qu.:15.43   1st Qu.:4.000   1st Qu.:120.8   1st Qu.: 96.5   1st Qu.:3.080   1st Qu.:2.581   1st Qu
 Median :19.20   Median :6.000   Median :196.3   Median :123.0   Median :3.695   Median :3.325   Median
 Mean   :20.09   Mean   :6.188   Mean   :230.7   Mean   :146.7   Mean   :3.597   Mean   :3.217   Mean
 3rd Qu.:22.80   3rd Qu.:8.000   3rd Qu.:326.0   3rd Qu.:180.0   3rd Qu.:3.920   3rd Qu.:3.610   3rd Qu
 Max.   :33.90   Max.   :8.000   Max.   :472.0   Max.   :335.0   Max.   :4.930   Max.   :5.424   Max.
```

```
       am              gear            carb      
 Min.   :0.0000   Min.   :3.000   Min.   :1.000  
 1st Qu.:0.0000   1st Qu.:3.000   1st Qu.:2.000  
 Median :0.0000   Median :4.000   Median :2.000  
 Mean   :0.4062   Mean   :3.688   Mean   :2.812  
 3rd Qu.:1.0000   3rd Qu.:4.000   3rd Qu.:4.000  
 Max.   :1.0000   Max.   :5.000   Max.   :8.000  
```

Text

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

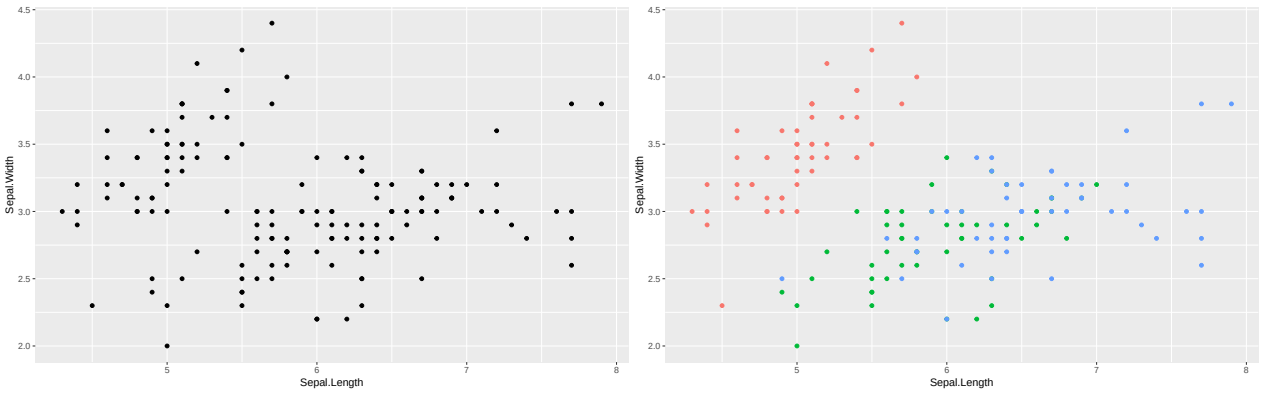
table

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

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

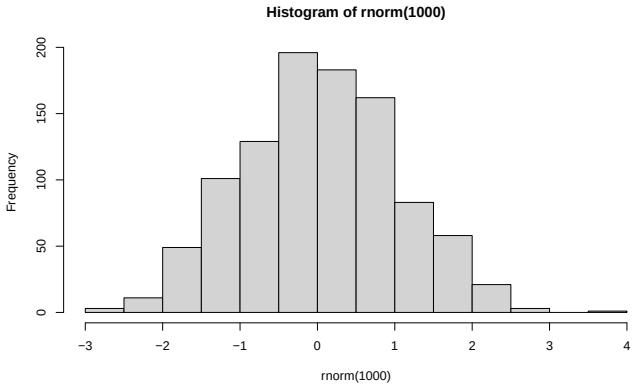
Two ggplots

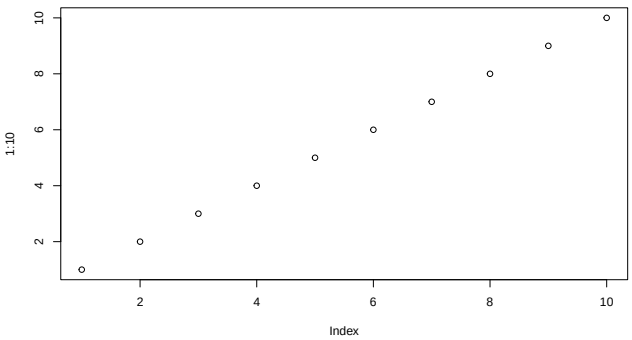
```
ggplot(iris,aes(Sepal.Length,Sepal.Width))+geom_point()
ggplot(iris,aes(Sepal.Length,Sepal.Width,colour=Species)) + geom_point() + guides(colour=FALSE)
```



Two plots

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


Histogram of rnorm(1000)
Frequency
0
50
100
150
200
−3
−2
−1
0
1
2
3
4
rnorm(1000)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