

Introduction to MoffittFunctions

William (Jimmy) Fulp

2018-11-09

Overview

MoffittFunctions is a collection of useful functions designed to assist in analysis and creation of professional reports. The current MoffittFunctions functions can be broken down to the following sections:

- Testing Functions
 - two_samp_bin_test
 - two_samp_cont_test
 - cor_test
- Fancy Output Functions
 - pretty_pvalues
 - stat_paste
 - paste_tbl_group
 - pretty_model_output
 - run_pretty_model_output
 - pretty_km_output
 - run_pretty_km_output
- Utility Functions
 - round_away_0
 - get_session_info
 - get_full_name
- Example Data
 - Bladder_Cancer

```
# Loading MoffittFunctions and Example Dataset
library(MoffittFunctions)
data("Bladder_Cancer")
```

Testing Functions

There are currently three testing functions, performing the appropriate statistical test depending on the data and options, and producing a p value.

Comparing Two Groups (Binary Variable) for a Binary Variable

`two_samp_bin_test()` ## Comparing Two Groups (Binary Variable) for a Continuous Variable

`two_samp_cont_test()` is used for comparing a continuous variable to a binary (two group) variable, with parametric (t.test) and non-parametric (Wilcox Rank-Sum) options. Also pair data is allowed, where there are parametric (paired t.test) and non-parametric (Wilcox Signed-Rank) options.

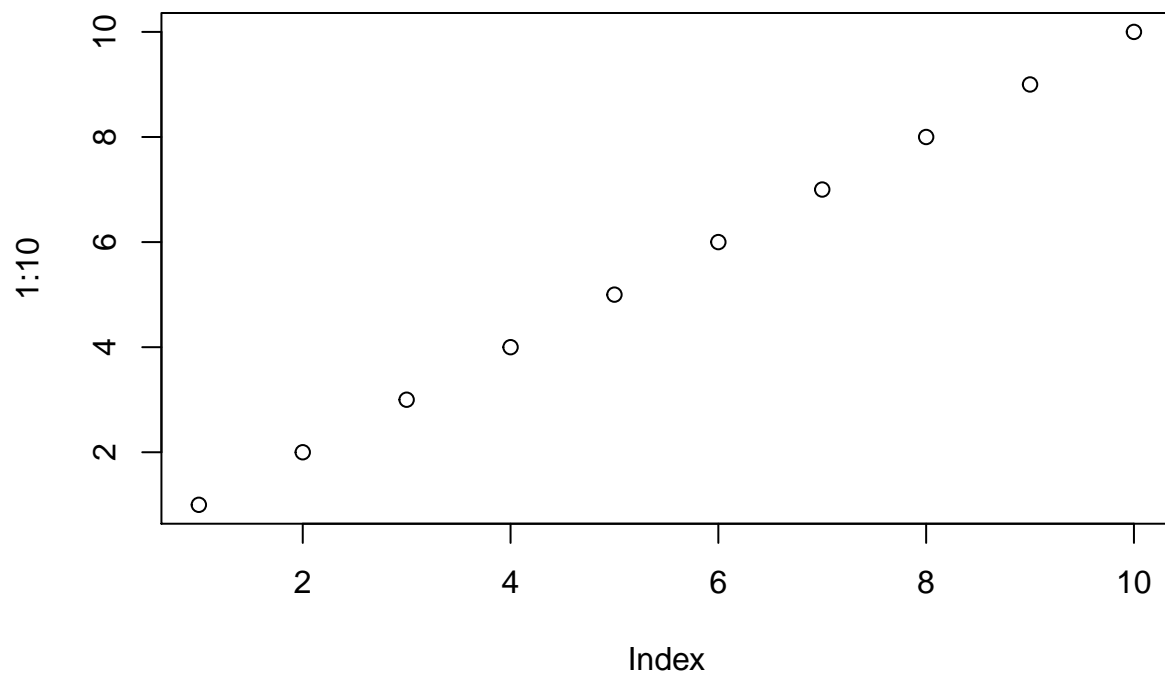
Comparing Two Continuous Variables

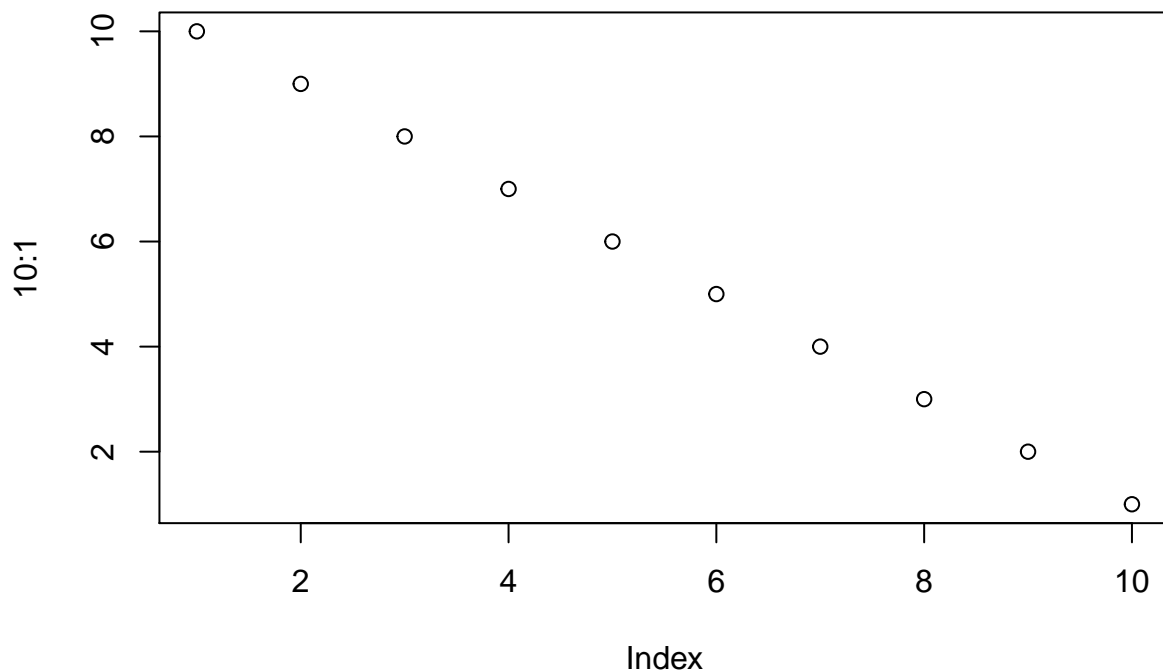
`cor_test()`

Fancy Output Functions

Utility Functions

```
plot(1:10)  
plot(10:1)
```





You can enable figure captions by `fig_caption: yes` in YAML:

output:

```
rmarkdown::html_vignette:
  fig_caption: yes
```

Then you can use the chunk option `fig.cap = "Your figure caption."` in **knitr**.

More Examples

You can write math expressions, e.g. $Y = X\beta + \epsilon$, footnotes¹, and tables, e.g. using `knitr::kable()`.

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2
Merc 280	19.2	6	167.6	123	3.92	3.440	18.30	1	0	4	4

Also a quote using `>`:

“He who gives up [code] safety for [code] speed deserves neither.” (via)

¹A footnote here.