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#### Minimal example for Pandoc.brew

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### Introduction

We have two meta-information above:

- author
- title

A third field could be there too: date. For details, please check out Pandoc's homepage or just use pandoc.title function of this package.

As you can see writing and formatting paragraphs cannot be easier :)

But what about R? Let us return pi: 3.142

## R objects

Pander.brew would transform any returned R object to Pandoc's markdown in each code block.

For example mtcars's first 5 cases look like:

Table 1: Table continues below

•	mpg								
		$\operatorname{cyl}$	$\operatorname{disp}$	hp	$\operatorname{drat}$	$\mathbf{wt}$	qsec	vs	am
Mazda RX4	21	6	160	110	3.9	2.62	16.46	0	1
Mazda RX4 Wag	21	6	160	110	3.9	2.875	17.02	0	1
Datsun 710	22.8	4	108	93	3.85	2.32	18.61	1	1
Hornet 4 Drive	21.4	6	258	110	3.08	3.215	19.44	1	0
Hornet Sportabout	18.7	8	360	175	3.15	3.44	17.02	0	0

	gear	carb
Mazda RX4	4	4
Mazda RX4 Wag	4	4
Datsun 710	4	1
Hornet 4 Drive	3	1
Hornet Sportabout	3	2

As you can see some formatting was added to the returned table and was also split up as the original table would have been too wide to fit on the screen (any panderer still using a VT100 terminal?) or standard paper. If you do not like that split up, just set the according panderOption!

We could try other R objects too, for example let us check chisq.test on some variables of mtcars:

Table 3: Pearson's Chi-squared test: mtcars\$am and mtcars\$gear

Test statistic	df	P value		
20.94	2	2.831e-05 * * *		

#### $\mathbf{WARNING}^1$

And we got a warning above!

<sup>&</sup>lt;sup>1</sup>Chi-squared approximation may be incorrect

### Returning plot

Plots are automatically grabbed between brew tags and some custom formatting applied (if evalsOptions('graph.unify') is set to TRUE):

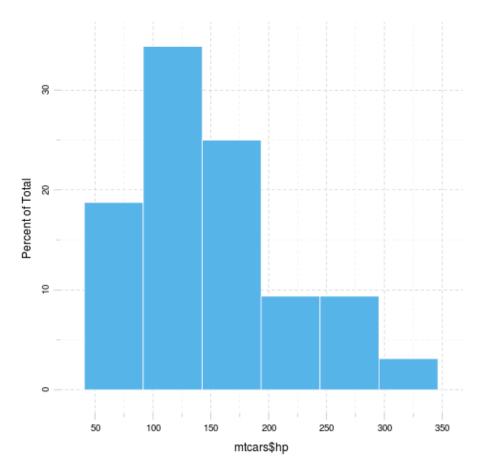
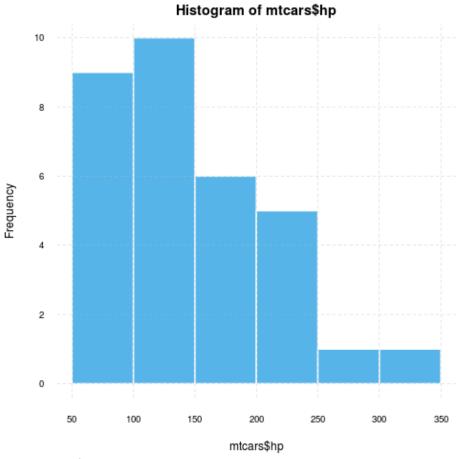


Figure 1:

The above lattice looks (IMHO) pretty cool, but what about using base plot?



#### $WARNING^2$

This should be quite similar by my intention :)

What about ggplot2?

And adding a caption is easy with even some modified panderOptions:

# Captions

Just like with tables:

<sup>&</sup>lt;sup>2</sup>Applying default formatting to image is somehow compromised (the result could differ from what you specified in panderOptions). Hints: printing lattice/ggplot2 is not needed and tweaking base plots with par might have some side-effects!

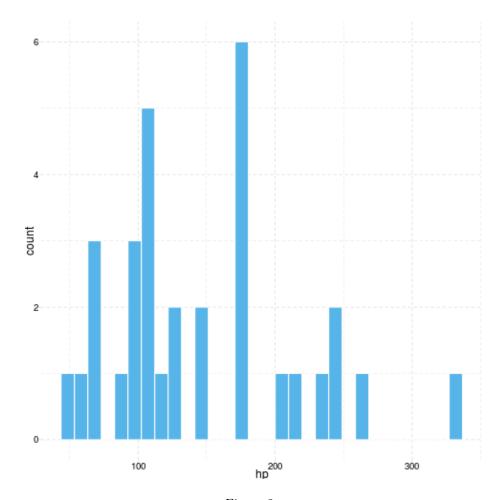


Figure 2:

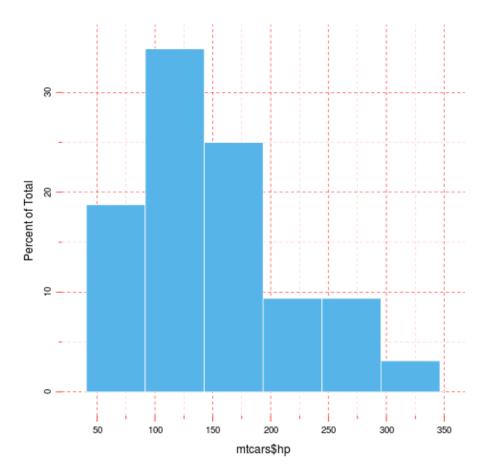


Figure 3: This is a caption, right?

Table 4: Here goes the first two lines of USArrests

-			UrbanPop	Rape
	Murder	Assault		
Alabama	13.2	236	58	21.2
Alaska	10	263	48	44.5

# Multiple results

And the chunks can result in multiple R objects of course:

- 1, 2, 3, 4 and 5
- 3.142
- 110, 110, 93, 110, 175, 105, 245, 62, 95, 123, 123, 180, 180, 180, 205, 215, 230, 66, 52, 65, 97, 150, 150, 245, 175, 66, 91, 113, 264, 175, 335 and 109

### It happens

 $\mathbf{ERROR}^3$ 

<sup>&</sup>lt;sup>3</sup>object 'unknown.R.object' not found