R Markdown v2 Demo

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Contents

1 Start with a cool section

A bit *introduction* here.

You can use traditional **Markdown** syntax, such as links and `code`.

2 Followed by another section

Of course you can write lists:

- apple
- pear
- banana

Or ordered lists:

1. items
2. will
3. be
4. ordered
   - nested
   - items

3 More sections

3.1 Hi

hi hi

3.2 Hello

hello hello

3.3 Howdy

howdy howdy

4 Okay, some R code

```r
fit = lm(dist ~ speed, data = cars)
b = coef(fit)  # coefficients
summary(fit)
```

```
##
## Call:
## lm(formula = dist ~ speed, data = cars)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -29.069  -9.525  -2.272   9.215  43.201
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept) -17.5791     6.7584  -2.601   0.0123 *
## speed         3.9324     0.4155   9.464 1.49e-12 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 15.38 on 48 degrees of freedom
## Multiple R-squared:  0.6511, Adjusted R-squared:  0.6438
## F-statistic: 89.57 on 1 and 48 DF,  p-value: 1.49e-12
```

The code will be highlighted in all output formats.

5 And some pictures

```r
par(mfrow = c(2, 2), pch = 20, mar = c(4, 4, 2, .1),
    bg = 'white')
plot(fit)
```
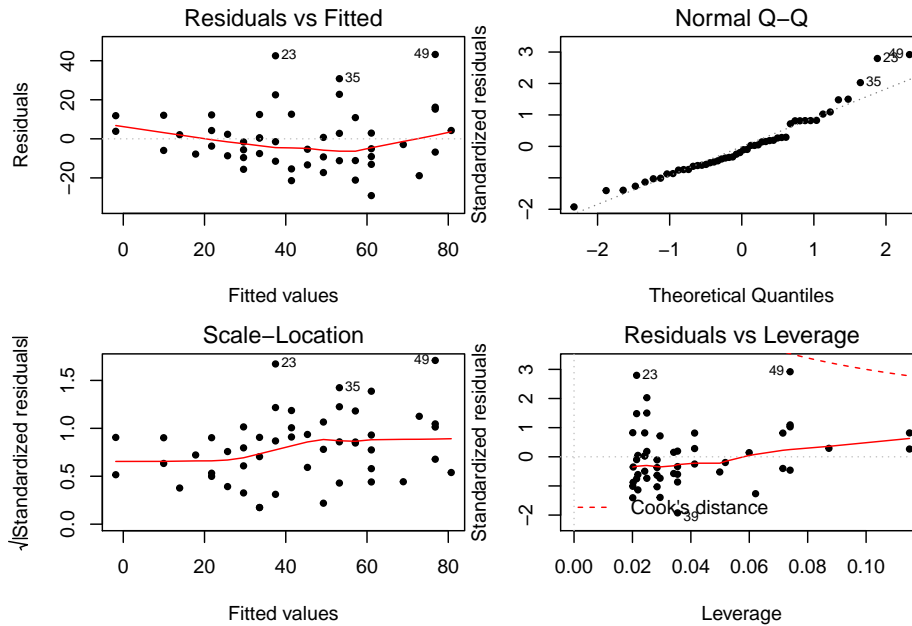
6 A little bit math

Our regression equation is $Y = -17.5790949 + 3.9324088x$, and the model is:

$$Y = \beta_0 + \beta_1 x + \epsilon$$

7 Pandoc extension: definition lists

Programmer A programmer is the one who turns coffee into code.
LaTeX A simple language with a couple of backslashes.

8 Pandoc extension: examples

We have some examples.

(1) Think what is `0.3 + 0.4 - 0.7`. Zero. Easy.
(2) Now think what is `0.3 - 0.7 + 0.4`. Still zero?

People are often surprised by (2).

9 Pandoc extension: tables

A table here.

Table: Demonstration of simple table syntax.

| | | | as.factor(vs) | | | | | | |
| | | | 0 | | | 1 | | | |
as.factor(am)		min	mean	median	max	min	mean	median	max
0	mpg	10.4	15.05	15.20	19.2	17.8	20.74	21.4	24.4
	hp	150.0	194.17	180.00	245.0	62.0	102.14	105.0	123.0
1	mpg	15.0	19.75	20.35	26.0	21.4	28.37	30.4	33.9
	hp	91.0	180.83	142.50	335.0	52.0	80.57	66.0	113.0

10 Pandoc extension: footnotes

We can also write footnotes[1].

Or write some inline footnotes[2].

11 Pandoc extension: citations

We compile the R Markdown file to Markdown through **knitr** (Xie 2015) in R (R Core Team 2015). For more about Xie (2015), see http://yihui.name/knitr.

References

R Core Team. 2015. *R: A Language and Environment for Statistical Computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Xie, Yihui. 2015. *Knitr: A General-Purpose Package for Dynamic Report Generation in R.* http://CRAN.R-project.org/package=knitr.

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[1] hi, I'm a footnote

[2] as you can see here