

ASSIGNMENT 4

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2020-04-20

Markdown Basics

Favorite Foods

1. Biryani
2. Gulab Jamun
3. Pizza

Images

Add a Quote

From Spiderman movie:

With great power comes great responsibility

Add an Equation

Standard deviation equation is: $\sigma = \sqrt{(\sum (x_i - \mu)^2 / N)}$

Add a Footnote

A footnote¹

Add Citations

- R for Everyone (Lander 2014)
- Discovering Statistics Using R (Field, Miles, and Field 2012)

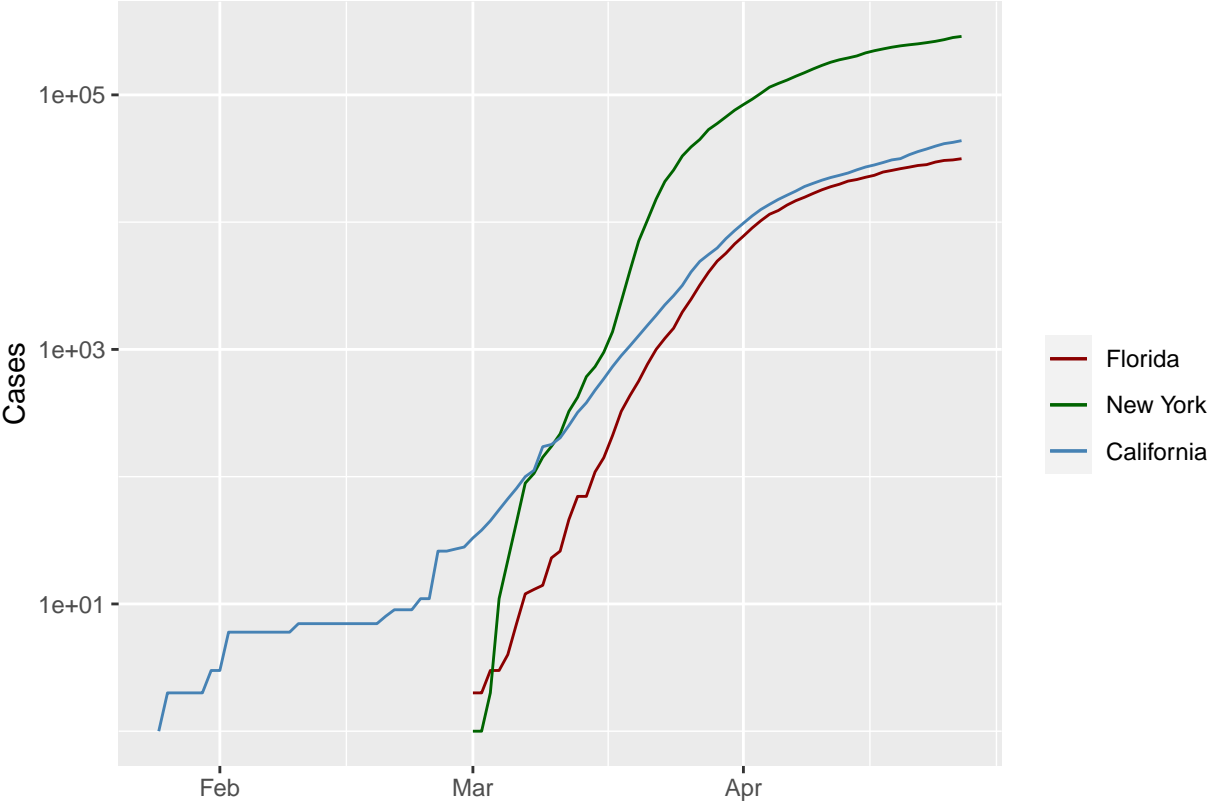
Inline Code

¹R Markdown quick refresher.

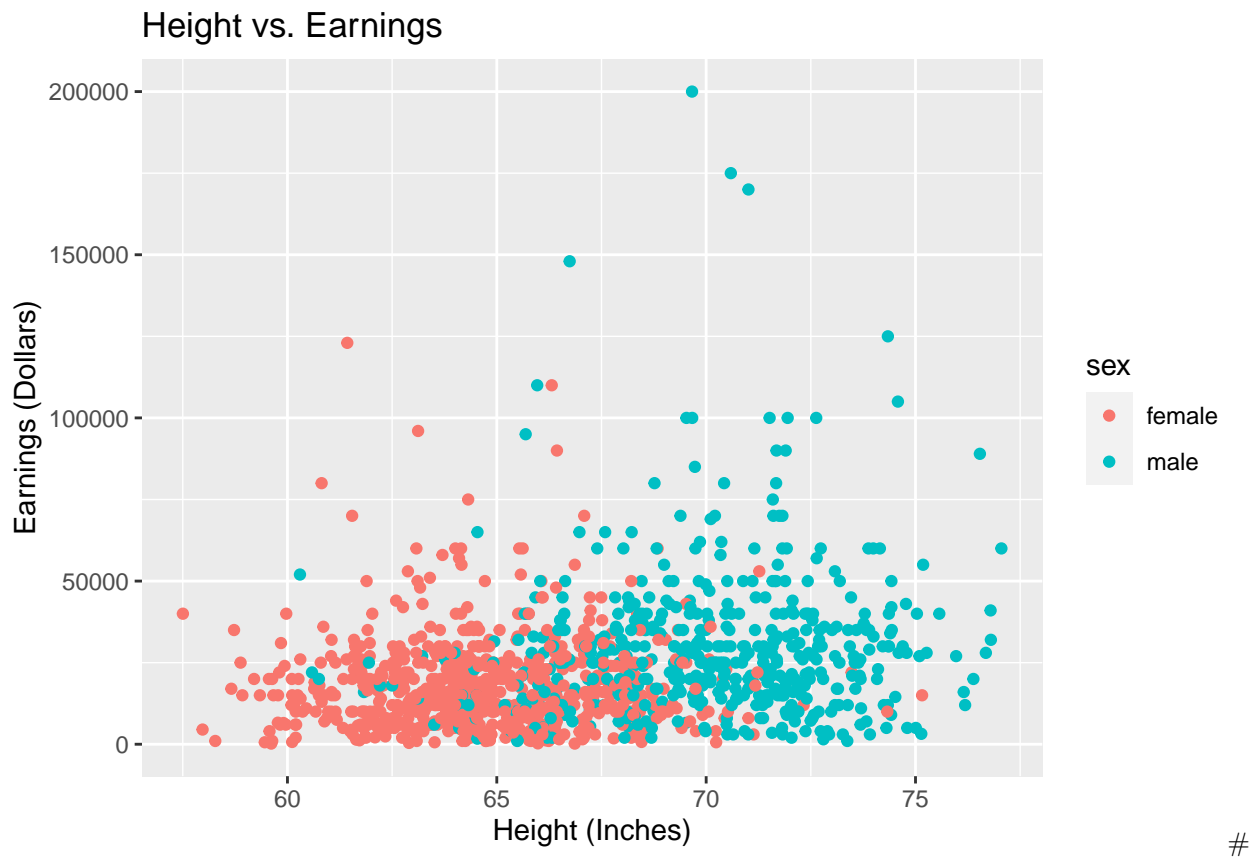


Figure 1: All Cases (Log Plot)

NY Times COVID-19 Data



R4DS Height vs Earnings



Tables

Knitr Table with Kable

```
characters_df <- read.csv(file = "./lotr_characters.csv")
knitr :: kable(head(characters_df), caption = 'One Ring to Rule Them All')
```

Table 1: One Ring to Rule Them All

birth	death	gender	hair	height	name	race	role
TA 2978	February 26 ,3019	Female			Adanel	Men	
	March ,3019	Male	Dark (book) Light brown (movie)		Boromir	Men	
TA 280	TA 515	Male			Lagduf	Orcs	
		Male			Tarcil	Men	A
SA 2709	SA 2962	Male			Fire-drake of Gondolin	Dragon	
		Male			Ar-Adûnakhôr	Men	N

Pandoc Table

```
# I was not able to find exact character.df, lord of the rings file that assignment
# has mentioned, thus to show the functionality I used mtcars dataset
library(pander)
pandoc.table(mtcars, style = 'rmarkdown')
```

```
##
##
## |      &nbsp;      | mpg | cyl | disp | hp | drat | wt |
## | :-----: | :---: | :---: | :---: | :---: | :---: | :---: |
## |      **Mazda RX4**      | 21 | 6 | 160 | 110 | 3.9 | 2.62 |
## |      **Mazda RX4 Wag**  | 21 | 6 | 160 | 110 | 3.9 | 2.875 |
## |      **Datsun 710**     | 22.8 | 4 | 108 | 93 | 3.85 | 2.32 |
## |      **Hornet 4 Drive**  | 21.4 | 6 | 258 | 110 | 3.08 | 3.215 |
## |      **Hornet Sportabout** | 18.7 | 8 | 360 | 175 | 3.15 | 3.44 |
## |      **Valiant**        | 18.1 | 6 | 225 | 105 | 2.76 | 3.46 |
## |      **Duster 360**     | 14.3 | 8 | 360 | 245 | 3.21 | 3.57 |
## |      **Merc 240D**      | 24.4 | 4 | 146.7 | 62 | 3.69 | 3.19 |
## |      **Merc 230**       | 22.8 | 4 | 140.8 | 95 | 3.92 | 3.15 |
## |      **Merc 280**       | 19.2 | 6 | 167.6 | 123 | 3.92 | 3.44 |
## |      **Merc 280C**      | 17.8 | 6 | 167.6 | 123 | 3.92 | 3.44 |
## |      **Merc 450SE**     | 16.4 | 8 | 275.8 | 180 | 3.07 | 4.07 |
## |      **Merc 450SL**     | 17.3 | 8 | 275.8 | 180 | 3.07 | 3.73 |
## |      **Merc 450SLC**    | 15.2 | 8 | 275.8 | 180 | 3.07 | 3.78 |
## |      **Cadillac Fleetwood** | 10.4 | 8 | 472 | 205 | 2.93 | 5.25 |
## |      **Lincoln Continental** | 10.4 | 8 | 460 | 215 | 3 | 5.424 |
## |      **Chrysler Imperial** | 14.7 | 8 | 440 | 230 | 3.23 | 5.345 |
## |      **Fiat 128**       | 32.4 | 4 | 78.7 | 66 | 4.08 | 2.2 |
## |      **Honda Civic**    | 30.4 | 4 | 75.7 | 52 | 4.93 | 1.615 |
## |      **Toyota Corolla**  | 33.9 | 4 | 71.1 | 65 | 4.22 | 1.835 |
## |      **Toyota Corona**  | 21.5 | 4 | 120.1 | 97 | 3.7 | 2.465 |
## |      **Dodge Challenger** | 15.5 | 8 | 318 | 150 | 2.76 | 3.52 |
## |      **AMC Javelin**    | 15.2 | 8 | 304 | 150 | 3.15 | 3.435 |
## |      **Camaro Z28**     | 13.3 | 8 | 350 | 245 | 3.73 | 3.84 |
## |      **Pontiac Firebird** | 19.2 | 8 | 400 | 175 | 3.08 | 3.845 |
## |      **Fiat X1-9**      | 27.3 | 4 | 79 | 66 | 4.08 | 1.935 |
## |      **Porsche 914-2**  | 26 | 4 | 120.3 | 91 | 4.43 | 2.14 |
## |      **Lotus Europa**   | 30.4 | 4 | 95.1 | 113 | 3.77 | 1.513 |
## |      **Ford Pantera L**  | 15.8 | 8 | 351 | 264 | 4.22 | 3.17 |
## |      **Ferrari Dino**    | 19.7 | 6 | 145 | 175 | 3.62 | 2.77 |
## |      **Maserati Bora**   | 15 | 8 | 301 | 335 | 3.54 | 3.57 |
## |      **Volvo 142E**     | 21.4 | 4 | 121 | 109 | 4.11 | 2.78 |
##
```

Table: Table continues below

```
##
##
## |      &nbsp;      | qsec | vs | am | gear | carb |
## | :-----: | :---: | :---: | :---: | :---: | :---: |
## |      **Mazda RX4**      | 16.46 | 0 | 1 | 4 | 4 |
## |      **Mazda RX4 Wag**  | 17.02 | 0 | 1 | 4 | 4 |
## |      **Datsun 710**     | 18.61 | 1 | 1 | 4 | 1 |
## |      **Hornet 4 Drive**  | 19.44 | 1 | 0 | 3 | 1 |
## |      **Hornet Sportabout** | 17.02 | 0 | 0 | 3 | 2 |
## |      **Valiant**        | 20.22 | 1 | 0 | 3 | 1 |
## |      **Duster 360**     | 15.84 | 0 | 0 | 3 | 4 |
## |      **Merc 240D**      | 20 | 1 | 0 | 4 | 2 |
## |      **Merc 230**       | 22.9 | 1 | 0 | 4 | 2 |
## |      **Merc 280**       | 18.3 | 1 | 0 | 4 | 4 |
## |      **Merc 280C**      | 18.9 | 1 | 0 | 4 | 4 |
```

##		**Merc 450SE**		17.4		0		0		3		3	
##		**Merc 450SL**		17.6		0		0		3		3	
##		**Merc 450SLC**		18		0		0		3		3	
##		**Cadillac Fleetwood**		17.98		0		0		3		4	
##		**Lincoln Continental**		17.82		0		0		3		4	
##		**Chrysler Imperial**		17.42		0		0		3		4	
##		**Fiat 128**		19.47		1		1		4		1	
##		**Honda Civic**		18.52		1		1		4		2	
##		**Toyota Corolla**		19.9		1		1		4		1	
##		**Toyota Corona**		20.01		1		0		3		1	
##		**Dodge Challenger**		16.87		0		0		3		2	
##		**AMC Javelin**		17.3		0		0		3		2	
##		**Camaro Z28**		15.41		0		0		3		4	
##		**Pontiac Firebird**		17.05		0		0		3		2	
##		**Fiat X1-9**		18.9		1		1		4		1	
##		**Porsche 914-2**		16.7		0		1		5		2	
##		**Lotus Europa**		16.9		1		1		5		2	
##		**Ford Pantera L**		14.5		0		1		5		4	
##		**Ferrari Dino**		15.5		0		1		5		6	
##		**Maserati Bora**		14.6		0		1		5		8	
##		**Volvo 142E**		18.6		1		1		4		2	

References

1. https://rmarkdown.rstudio.com/authoring_bibliographies_and_citations.html
 2. <https://www.rstudio.com/wp-content/uploads/2016/03/rmarkdown-cheatsheet-2.0.pdf>
- Field, A., J. Miles, and Z. Field. 2012. *Discovering Statistics Using r*. SAGE Publications. <https://books.google.com/books?id=wd2K2zC3swIC>.
- Lander, J. P. 2014. *R for Everyone: Advanced Analytics and Graphics*. Addison-Wesley Data and Analytics Series. Addison-Wesley. <https://books.google.com/books?id=3eBVAgAAQBAJ>.