ASSIGNMENT 4

Buros Nicole

2022-04-21

Markdown Basics

Favorite Foods

- Tomatoes
- Olives
- Oysters

Images

Add a Quote

"Keep your face always toward the sunshine, and shadows will fall behind you."

—Walt Whitman

Add an Equation

$$\textstyle\sum_{n=1}^{10} n^2$$

Add a Footnote

1

This is a footnote

Add Citations

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

Inline Code

¹This is a footnote.



Figure 1: All Cases (Log Plot)

```
library(ggplot2)
setwd("C:/Users/njack/OneDrive/Documents/DSC 520/dsc520")
heights_df <- read.csv("data/r4ds/heights.csv")
covid_df <- read.csv("data/nytimes/covid-19-data/us-states.csv")
covid_df$date <- as.Date(covid_df$date)
california_df <- covid_df[which(covid_df$state == "California"), ]
ny_df <- covid_df[which(covid_df$state == "New York"), ]
florida_df <- covid_df[which(covid_df$state == "Florida"), ]
heights_df</pre>
```

```
##
                  height
                             sex ed age
                                             race
          earn
## 1
         50000 74.42444
                                            white
                            male 16
                                     45
## 2
         60000 65.53754 female 16
                                     58
                                            white
## 3
         30000 63.62920 female 16
                                            white
## 4
         50000 63.10856 female 16
                                            other
                                     91
## 5
         51000 63.40248 female 17
                                     39
                                            white
          9000 64.39951 female 15
## 6
                                     26
                                            white
## 7
         29000 61.65633 female 12
                                     49
                                            white
## 8
         32000 72.69854
                           male 17
                                     46
                                            white
## 9
          2000 72.03947
                           male 15
                                     21 hispanic
## 10
         27000 72.23493
                           male 12
                                     26
                                            white
## 11
          6530 69.51215
                           male 16
                                     65
                                            white
## 12
         30000 68.03161
                           male 11
                                     34
                                            white
## 13
         12000 67.55693
                           male 12
                                     27
                                            white
## 14
         12000 65.43059 female 12
                                            white
## 15
         22000 65.66285 female 16
                                     35
                                            white
## 16
         17000 67.75877
                            male 12
                                     58
                                            white
## 17
                                     29
         40000 68.35184 female 14
                                            white
## 18
         44000 69.60957
                            male 13
                                            white
## 19
          7000 64.18457 female 12
                                     55
                                            black
## 20
         53000 73.07461
                            male 13
                                     35
                                            black
## 21
          5000 62.37553 female 13
                                     51
                                            white
## 22
         14000 63.02393 female 14
                                            white
## 23
          5500 67.22990
                           male 14
                                     22
                                            white
## 24
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                                     41
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## 25
         34000 72.07965
                           male 12
                                     45
                                            white
## 26
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                                            black
## 27
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                                     60
                                            white
## 28
         50000 71.64285
                           male 16
                                     38
                                            white
## 29
         41000 76.79309
                           male 16
                                     33
                                            white
## 30
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                                     25
                                            white
## 31
         25000 63.80262 female 12
                                     33
                                            white
## 32
         75000 71.59223
                            male 17
                                     39
                                            white
## 33
         27000 67.52196
                            male 17
                                            white
## 34
         12000 64.39435 female 12
                                     26
                                            white
## 35
          7500 61.17822 female 14
                                     78
                                            white
## 36
         30000 66.98388 female 14
                                     31
                                            black
## 37
         21000 65.31646 female 12
                                            white
## 38
         27000 63.57419 female 14
                                     26
                                            white
## 39
          3000 66.61100 female 15
                                            white
## 40
         25000 64.91176 female 12
                                     30
                                            white
## 41
         24000 64.78968 female 12
                                            white
         32000 66.93769 female 18
## 42
                                     29
                                            white
```

```
## 43
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                                     30
                                            white
## 44
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                                     21 hispanic
         18700 64.79325 female 13
## 45
                                     32
                                            white
##
  46
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                                     29
                                            white
##
  47
          3500 71.57215
                           male 10
                                     18
                                            white
         13000 67.31441
## 48
                           male
                                 8
                                     56
                                            black
## 49
         25000 69.89987
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                                            white
## 50
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                            male 17
                                     41
                                            white
## 51
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                                            white
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## 53
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                                     28
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## 54
         35000 71.16680
                            male 12
                                     32
                                            white
##
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                                     55
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                                     29
                                            white
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                                     27
                                            white
##
  60
         16000 61.82776
                            male 14
                                     28 hispanic
## 61
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                                     43
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## 62
          4000 63.84127 female
                                     68
                                            white
          3840 66.97477 female
## 63
                                 9
                                     52
                                            white
## 64
         22000 71.45149
                            male 12
                                            white
## 65
           200 59.61265 female 16
                                     53
                                            white
         26000 65.79939 female 16
##
   66
                                     27
                                            white
## 67
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                                     21
                                            white
##
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                                     39
                                            white
##
  69
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                                            white
##
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                                     68
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## 71
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## 73
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                                     39
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##
  74
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                                  8
                                     39 hispanic
##
  75
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                                     32 hispanic
## 76
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                            male 12
                                     33
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                                     38
                                            white
## 78
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                                            white
## 79
         12000 65.82114 female 13
                                     63
                                            white
## 80
         20000 70.39755 female 10
                                     61
                                            white
## 81
         20000 68.37778 female 12
                                     36
                                            white
## 82
         20000 69.93270
                                     23
                            male 14
                                            white
  83
          1200 66.17181 female 12
##
                                            white
## 84
           700 68.45636 female 16
                                     32
                                            white
         20000 69.90386
##
  85
                            male 16
                                     27
                                            white
##
  86
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                                     22 hispanic
         30000 63.36335 female 12
## 87
                                     73
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## 88
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## 89
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                                     89
                                            white
## 90
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                                            white
## 91
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                                     63
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                                            white
## 93
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## 94
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                                            black
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                           male 17
                                     23
                                            white
## 96
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                                            white
```

```
## 97
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## 98
         15000 63.34290 female 12
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                           male 12
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## 100
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                                            black
##
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                                     37
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         17000 65.60084 female 14
## 103
                                     43 hispanic
## 104
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                                     30
                                            white
## 105
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## 106
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                                            white
## 107
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                                            white
## 108
         27000 61.04220 female 18
                                     43
                                            white
## 109
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                                     28
                                            white
         70000 61.54482 female 16
## 110
                                     38
                                            white
## 111
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                                     40
                                            white
## 112
          5000 68.16377
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                                     24
                                            white
## 113
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                                     26
                                            white
## 114
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                           male 15
                                     21
                                            white
         60000 64.14708 female 16
## 115
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                                            white
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## 117
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                                     38
                                            white
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                                     41
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                                            white
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                                            white
## 123
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                                     42
                                            white
         45000 71.18591
## 124
                           male 17
                                     62
                                            white
## 125
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                                     31
                                            white
## 126
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                                     71
                                            white
## 127
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                            male 14
                                     31
                                            white
## 128
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                                     32
                                            white
## 129
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                                            white
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                                     69
                                            white
## 131
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                                     56 hispanic
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                                     44
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## 133
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                                            black
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                                     45
                                            white
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## 136
                                     50
                                            other
          2400 62.33793 female 16
## 137
                                            white
## 138
          1000 66.24001 female 15
                                     28
                                            white
## 139
         27000 68.09847
                           male 12
                                     27
                                            white
## 140
          6600 59.77087 female 14
                                     28 hispanic
## 141
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                           male
                                 8
                                     43
                                            white
## 142
         90000 71.68015
                            male 12
                                     26
                                            white
## 143
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                                     42
                                            white
## 144
         20000 68.35626
                            male 10
                                     32
                                            white
## 145
         15000 68.45654 female 12
                                     18
                                            white
## 146
         12000 68.78610 female 12
                                     60
                                            white
## 147
         24000 64.10224 female 16
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                                            white
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         20000 65.11349 female 14
                                     39
                                            white
         19000 60.64919 female 12
## 149
                                     46
                                            white
## 150
         10000 72.12570
                           male 12
                                     49
                                            white
```

```
## 151
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## 152
         25000 67.93190
                           male 14
                                     64
                                            white
         25000 70.44492
## 153
                           male 12
                                     24
                                            white
  154
         25000 71.36585
##
                           male 14
                                     32
                                            white
##
  155
         19000 71.12507
                           male 16
                                     61
                                            white
         44000 68.16014
## 156
                           male 16
                                     48
                                            white
## 157
         15000 60.11333 female 14
                                     49
                                            white
## 158
         17000 62.78820 female 12
                                     36
                                            white
## 159
         24000 68.07772
                           male 12
                                     56
                                            white
## 160
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                                     37
                                            white
## 161
         13000 69.71580
                           male 12
                                     74
                                            white
         65000 68.22067
## 162
                           male 16
                                     46
                                            white
## 163
          7000 60.88386 female 12
                                     63
                                            white
## 164
         40000 68.40754
                           male 18
                                     63
                                            white
## 165
         15000 66.00198 female 17
                                     43
                                            white
##
  166
         20000 69.79789
                            male 16
                                     25
                                            white
## 167
         20000 71.01071
                           male 12
                                     50
                                            white
##
  168
         20000 65.14241 female 12
                                     42
                                            white
## 169
         25000 65.96711 female 12
                                     49
                                            white
## 170
         49000 69.99053
                           male 13
                                     37
                                            white
## 171
         25000 61.87668 female 12
                                     65
                                            white
         11000 66.10888 female 14
## 172
                                     57
                                            white
         16000 61.05431 female 15
## 173
                                     38
                                            white
         35000 71.56357
## 174
                           male 14
                                     43
                                            white
## 175
        125000 74.34062
                           male 18
                                     45
                                            white
## 176
         23000 66.57699 female 12
                                     47
                                            white
## 177
         17000 66.11044 female 16
                                     28
                                            white
## 178
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                                            white
## 179
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                                     32
                           male 14
                                            white
## 180
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                                     47
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## 181
         10000 60.19882 female 12
                                     62
                                            white
## 182
         35000 61.91637 female 15
                                     39
                                            white
## 183
         15000 66.41355 female 12
                                     38
                                            white
         12000 63.69852 female 12
## 184
                                     39
                                            white
##
  185
          8000 71.29091
                           male 12
                                     68
                                            white
## 186
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                                     50
                                            white
## 187
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                           male 18
                                     50
                                            white
## 188
         45000 68.64007
                           male 11
                                     51
                                            white
## 189
         15000 64.38145 female 14
                                     22
                                            white
## 190
         15000 61.06026 female 12
                                     77
                                            white
## 191
         24000 66.78936 female 18
                                     51
                                            white
## 192
         25000 61.82930 female 13
                                     32
                                            white
         25000 62.60956 female 14
## 193
                                     54
                                            black
## 194
         20000 67.36466
                                     28
                           male 10
                                            other
## 195
         24000 68.01697 female 12
                                     24
                                            white
## 196
         44000 72.06415
                           male 16
                                     46
                                            white
## 197
         69000 70.10862
                           male 12
                                     38
                                            white
## 198
         62000 69.85249
                           male 18
                                     44
                                            white
## 199
         32000 67.45525
                           male 14
                                     32
                                            black
## 200
         20000 63.45313 female 12
                                     33
                                            black
## 201
                                     35
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                                            other
## 202
         25000 65.83480 female 17
                                     50
                                            white
## 203
        170000 71.01003
                           male 18
                                     45
                                            white
## 204
         35000 66.61942
                           male 16
                                     33
                                            white
```

```
## 205
         40000 75.56859
                           male 16
                                            black
         33000 68.95220
## 206
                           male 14
                                     30
                                            white
## 207
         18000 65.34873 female 12
                                            white
##
  208
         30000 61.75212 female 13
                                     43
                                            white
##
  209
         26000 61.76413 female 12
                                     31
                                            white
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          5000 62.41147 female 12
                                     21
                                            white
## 211
         20000 61.90433 female 16
                                            white
## 212
         17000 60.63861 female 12
                                     30
                                            white
## 213
         32000 64.82458 female 14
                                     28
                                            white
## 214
         15000 72.27075
                            male 14
                                     22
                                            white
## 215
         50000 71.67228
                           male 14
                                     55
                                            white
## 216
          8000 63.77093 female 12
                                     39
                                            white
                           male 14
## 217
         40000 70.78659
                                     51
                                            white
## 218
         40000 72.40979
                           male 15
                                            white
## 219
         32750 66.08798
                           male 12
                                     34
                                            white
## 220
         20000 64.99933 female 14
                                     69
                                            white
## 221
         36000 64.52930 female 15
                                     39
                                            black
## 222
          6000 61.74268 female 12
                                            white
## 223
         12000 65.84031 female 14
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                                     34
## 224
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                           male 14
                                            white
##
  225
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                                            white
## 226
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## 227
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                                            white
          6000 68.00212 female 18
## 228
                                     39
                                            white
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                                     82
                                            other
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                                     39
                                            black
## 231
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                           male 12
                                     23
                                            black
          2000 64.76538 female 12
##
  232
                                     32
                                            white
## 233
         65000 64.53856
                                     28
                           male 12
                                            white
## 234
         50000 71.58593
                           male 12
                                     41
                                            white
## 235
         11000 68.34822 female 12
                                     38
                                            white
##
  236
         35000 74.43320
                            male 18
                                     30
                                            white
##
   237
         27000 63.21770
                            male 12
                                     33
                                            white
  238
          3500 64.31432 female 12
##
                                            white
                                     61
##
   239
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                                     37
                                            white
         20000 67.49495 female 18
## 240
                                     29
                                            white
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                                            white
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                                     21
                           male 12
                                            white
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                                     78
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## 244
                                     23 hispanic
## 245
         35000 68.54049
                           male 16
                                     65 hispanic
## 246
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                                     28
                                            white
         15000 67.69396 female 12
##
  247
                                     33
                                            white
##
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         20000 64.21270 female 12
                                     29
                                            white
## 250
         10500 67.22247
                                     42 hispanic
                            male 12
## 251
         13000 69.90214
                           male 16
                                     22
                                            white
## 252
         10000 61.77745 female 12
                                            white
##
  253
          3000 63.08135 female 12
                                     37
                                            white
##
   254
         24000 62.33487 female 14
                                     29
                                            white
##
  255
         17000 68.69584 female 13
                                     35
                                            white
## 256
         11000 64.09801 female 12
                                     48
                                            white
## 257
         32000 69.03400 female 14
                                     40
                                            white
## 258
         17000 58.66032 female 15
                                     26
                                            white
```

```
## 259
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                                            other
          2100 62.09126 female 12
## 260
                                     21
                                            black
## 261
          3192 75.13845
                           male 11
                                            black
##
  262
         17000 63.31428 female 17
                                     26
                                            white
##
  263
         30000 64.55410 female 13
                                     28
                                            white
  264
         15000 69.80036
##
                           male 12
                                     32
                                            white
         24000 67.84325 female 16
##
  265
                                     42
                                            white
## 266
         10000 64.95007 female 14
                                     67
                                            white
##
  267
         50000 69.21831
                           male
                                  8
                                     53
                                            white
##
  268
         50000 71.88612
                           male 16
                                     53
                                            white
  269
         20000 63.52426 female 17
                                     49
                                            white
## 270
         30000 62.67856 female 18
                                     54 hispanic
## 271
         22000 73.47394 female 14
                                     45
                                            white
## 272
         27000 75.09407
                            male 12
                                     24
                                            white
## 273
          4000 64.77306 female 12
                                     38
                                            white
## 274
         17500 66.25353 female 17
                                     26
                                            white
## 275
         16500 66.39351 female 14
                                     28
                                            white
## 276
         28000 64.00329 female 16
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## 277
         52000 65.57394 female 18
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                                     50
## 278
         15000 64.27616 female 16
                                     29
                                            white
## 279
         19000 62.64666 female 13
                                     32
                                            white
## 280
         27000 72.55974
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                                            white
## 281
         15000 71.78231
                           male
                                  8
                                     58
                                            white
  282
         15000 71.50386
##
                           male 14
                                     33
                                            white
## 283
         14500 64.15775 female 12
                                     55
                                            white
## 284
         24000 64.22769 female 13
                                     30
                                            white
## 285
         18000 67.79798
                           male 15
                                     36
                                            white
          4000 62.27896 female 12
##
  286
                                     68
                                            white
## 287
          4000 68.50410 female 13
                                     57
                                            white
## 288
           700 60.11268 female 12
                                     36
                                            white
## 289
         24000 64.97933 female 12
                                     91
                                            white
##
  290
         27000 75.96951
                            male 12
                                     39
                                            white
##
  291
         12000 72.32790 female 12
                                     35
                                            white
## 292
         22000 61.76565 female 18
                                     47
                                            white
##
  293
         30000 61.61640 female 13
                                     36
                                            white
         35000 70.55408
## 294
                           male 12
                                     61
                                            white
## 295
         20000 74.08120
                           male 12
                                            white
## 296
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                                            white
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```

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## 892
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                                     33
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  893
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                                            white
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##
                                     23
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                                     42
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##
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                                     48
                           male 15
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##
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                                     28
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                                     18
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## 899
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                                     21
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## 901
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## 903
                           male 14
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                           male 12
                                            white
## 905
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## 906
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```

```
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          8000 71.35958
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                           male 14
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                                     50
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                                     28
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```

```
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##
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##
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                                     26
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                                     21
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                            male 13
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##
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                                            white
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## 1006
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                                            white
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##
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## 1012
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                                            white
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## 1014
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```

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                                     48
                                           white
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## 1021
                                     55
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                                           white
## 1023
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## 1026
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                                     63 hispanic
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## 1038
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                                           white
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                                           white
  1049
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                                     36
                                           white
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                                           white
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                                     32 hispanic
## 1053
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                                           white
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                                           white
         32000 65.51632
  1055
                           male 16
                                     33
                                           white
## 1056
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                                     32
                                           white
##
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                                     30
                                           white
##
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## 1059
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                           male 13
                                     54
                                           white
         12000 68.53997
                                     62
## 1060
                           male
                                 4
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                           male 11
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                                     25 hispanic
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                                     36
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                                           black
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## 1068
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                                           white
```

```
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                           male 16
                                            other
## 1070
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                           male 15
                                     65
                                            white
         35000 63.64059 female 12
## 1071
                                            black
## 1072
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                           male 16
                                     22
                                            white
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         30000 67.13533 female 16
## 1074
                                     27
                                            white
         80000 71.67133
## 1075
                           male 14
                                     58
                                            white
## 1076
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                                     32
                                            white
## 1077
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                                     34
                                            white
## 1078 200000 69.66276
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                                            white
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                            male 15
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                                     23 hispanic
## 1083
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                                     30
                            male 17
                                            white
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                            male 12
                                     75
                                            white
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##
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                                            white
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                                     19
                            male 12
                                            white
## 1091
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                                  3
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                                     43
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                                            white
## 1094
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                           male 12
                                     58
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                           male 16
                                     36
                                            black
##
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                                     22
                           male 13
                                            black
                                     28 hispanic
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                                     73
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                                            other
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                                     69
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## 1109
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## 1111
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                                     36 hispanic
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                                     40
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## 1114
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## 1116
                                     31
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                                            white
```

```
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         12000 64.00159 female 13
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## 1127
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## 1129
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## 1139
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## 1164
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         11000 63.30037 female
## 1167
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                                           white
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## 1176 27000 68.04935 female 14 29
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```

```
## 1177 30000 70.49075
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## 1178 12000 73.38321
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## 1179 20000 62.13713 female 17
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## 1183
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## 1188
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## 1190
                                        white
## 1191 60000 71.92584
                         male 12
                                  50
                                        white
## 1192
         6000 68.36849
                         male 12 27
                                        white
```

california_df

##		date	state	fips	cases	${\tt deaths}$
##	6	2020-01-25	${\tt California}$	6	1	0
##	10	2020-01-26	${\tt California}$	6	2	0
##	14	2020-01-27	${\tt California}$	6	2	0
##	18	2020-01-28	${\tt California}$	6	2	0
##	22	2020-01-29	${\tt California}$	6	2	0
##	26	2020-01-30	${\tt California}$	6	2	0
##	30	2020-01-31	${\tt California}$	6	3	0
##	34	2020-02-01	${\tt California}$	6	3	0
##	39	2020-02-02	California	6	6	0
##	44	2020-02-03	California	6	6	0
##	49	2020-02-04	California	6	6	0
##	54	2020-02-05	California	6	6	0
##	60	2020-02-06	California	6	6	0
##	66	2020-02-07	California	6	6	0
##	72	2020-02-08	California	6	6	0
##	78	2020-02-09	California	6	6	0
##	84	2020-02-10	${\tt California}$	6	7	0
##	90	2020-02-11	California	6	7	0
##	96	2020-02-12	California	6	7	0
##	103	2020-02-13	${\tt California}$	6	7	0
##	110	2020-02-14	California	6	7	0
##	117	2020-02-15	${\tt California}$	6	7	0
##	124	2020-02-16	${\tt California}$	6	7	0
##	131	2020-02-17	${\tt California}$	6	7	0
##	139	2020-02-18	${\tt California}$	6	7	0
##	147	2020-02-19	${\tt California}$	6	7	0
##	155	2020-02-20	${\tt California}$	6	8	0
##	163	2020-02-21	California	6	9	0
##	171	2020-02-22	California	6	9	0
##	179	2020-02-23	${\tt California}$	6	9	0
##	187	2020-02-24	${\tt California}$	6	11	0
##	195	2020-02-25	${\tt California}$	6	11	0
##	204	2020-02-26	${\tt California}$	6	26	0
##	213	2020-02-27	California	6	26	0

##	222	2020-02-28	${\tt California}$	6	27	0
##	232	2020-02-29	California	6	28	0
##	242	2020-03-01	California	6	33	0
##	255	2020-03-02	California	6	38	0
##	270	2020-03-03	California	6	45	0
##	286	2020-03-04	California	6	55	1
##	303	2020-03-05	California	6	67	1
##	324	2020-03-06	California	6	81	1
##	352	2020-03-07	${\tt California}$	6	100	1
##	385	2020-03-08	California	6	112	1
##	420	2020-03-09	${\tt California}$	6	172	2
##	457	2020-03-10	California	6	179	3
##	497	2020-03-11	${\tt California}$	6	202	4
##	543	2020-03-12	${\tt California}$	6	252	4
##	591	2020-03-13	${\tt California}$	6	320	5
##	642	2020-03-14	${\tt California}$	6	381	5
##	694	2020-03-15	${\tt California}$	6	478	6
##	747	2020-03-16	${\tt California}$	6	588	11
##	800	2020-03-17	${\tt California}$	6	732	14
##	854	2020-03-18	${\tt California}$	6	893	17
##	908	2020-03-19	${\tt California}$	6	1067	19
##	962	2020-03-20	${\tt California}$	6	1283	24
##	1016	2020-03-21	California	6	1544	28
##	1070	2020-03-22	California	6	1851	35
##	1124	2020-03-23	California	6	2240	39
##	1178	2020-03-24	California	6	2644	52
##	1232	2020-03-25	${\tt California}$	6	3183	67
##	1286	2020-03-26	California	6	4060	82
##	1340	2020-03-27	California	6	4914	102
##	1394	2020-03-28	California	6	5565	121
##	1449	2020-03-29	California	6	6266	130
##	1504	2020-03-30	California	6	7421	146
##	1559	2020-03-31	California	6	8582	183
##	1614	2020-04-01	California	6	9816	212
##	1669	2020-04-02	California	6	11190	247
##	1724	2020-04-03	California	6	12569	282
##	1779	2020-04-04	California	6	13796	323
##	1834	2020-04-05	California	6	15076	349
##	1889	2020-04-06	California	6	16284	386
##	1944	2020-04-07	California	6	17540	447
##	1999	2020-04-08	California	6	19043	506
##	2054	2020-04-09	California	6	20191	548
##	2109	2020-04-10	California	6	21366	594
##	2164	2020-04-11	California	6	22421	632
##	2219	2020-04-12	California	6	23323	676
##	2274	2020-04-13	California	6	24334	725
##	2329	2020-04-14	California		25758	778
##	2384	2020-04-15	California		27107	885
##	2439	2020-04-16	California	6	28142	971
##	2494	2020-04-17	California	6	29398	1050
##	2549	2020-04-18	California	6	30829	1146
##	2604	2020-04-19	California		31544	1176
##	2659	2020-04-20	California	6	33862	1223
##		2020-04-21			35844	1316

```
## 2769 2020-04-22 California 6 37573 1425

## 2824 2020-04-23 California 6 39534 1553

## 2879 2020-04-24 California 6 41368 1619

## 2934 2020-04-25 California 6 42347 1677

## 2989 2020-04-26 California 6 43691 1716
```

ny_df

##		date	\$	state	fips	cases	deaths
##	247	2020-03-01			36	1	0
##	262	2020-03-02	New	York	36	1	0
##	277	2020-03-03	New	York	36	2	0
##	294	2020-03-04	New	York	36	11	0
##	314	2020-03-05	New	York	36	22	0
##	339	2020-03-06	New	York	36	44	0
##	370	2020-03-07	New	York	36	89	0
##	405	2020-03-08	New	York	36	106	0
##	441	2020-03-09	New	York	36	142	0
##	479	2020-03-10	New	York	36	173	0
##	522	2020-03-11	New	York	36	217	0
##	569	2020-03-12	New	York	36	326	0
##	619	2020-03-13	New	York	36	421	0
##	670	2020-03-14	New	York	36	610	2
##	723	2020-03-15	New	York	36	732	6
##	776	2020-03-16	New	York	36	950	10
##	829	2020-03-17	New	York	36	1374	17
##	883	2020-03-18	New	York	36	2382	27
##	937	2020-03-19	New	York	36	4152	30
##	991	2020-03-20	New	York	36	7102	57
##	1045	2020-03-21	New	York	36	10356	80
##	1099	2020-03-22	New	York	36	15168	122
##	1153	2020-03-23	New	${\tt York}$	36	20875	159
##	1207	2020-03-24	New	${\tt York}$	36	25665	218
##	1261	2020-03-25	New	York	36	33066	325
##	1315	2020-03-26	New	York	36	38987	432
##	1369	2020-03-27	New	York	36	44635	535
##	1423	2020-03-28	New	York	36	53363	782
##	1478	2020-03-29	New	York	36	59568	965
##	1533	2020-03-30		York	36	67174	1224
##	1588	2020-03-31	New	York	36	75832	1550
##	1643	2020-04-01	New	York	36	83889	1941
##	1698	2020-04-02		York	36	92381	2373
##	1753	2020-04-03		York	36		2935
##	1808	2020-04-04		York	36	114996	3568
##	1863			York	36	122911	4161
##		2020-04-06			36	130689	4758
##		2020-04-07			36		5563
##		2020-04-08			36		6268
##		2020-04-09			36		7067
##		2020-04-10			36		7844
##		2020-04-11			36		8627
##		2020-04-12			36		9385
##		2020-04-13			36		10056
##	2358	2020-04-14	New	York	36	202208	10834

```
## 2413 2020-04-15 New York 36 213779 11586

## 2468 2020-04-16 New York 36 222284 12192

## 2523 2020-04-17 New York 36 229642 12822

## 2578 2020-04-18 New York 36 236763 13362

## 2633 2020-04-19 New York 36 242817 13869

## 2688 2020-04-20 New York 36 247543 14347

## 2743 2020-04-21 New York 36 251720 14828

## 2798 2020-04-22 New York 36 257246 15302

## 2853 2020-04-23 New York 36 263460 15740

## 2908 2020-04-24 New York 36 271621 16162

## 2963 2020-04-25 New York 36 282174 16599

## 3018 2020-04-26 New York 36 288076 16966
```

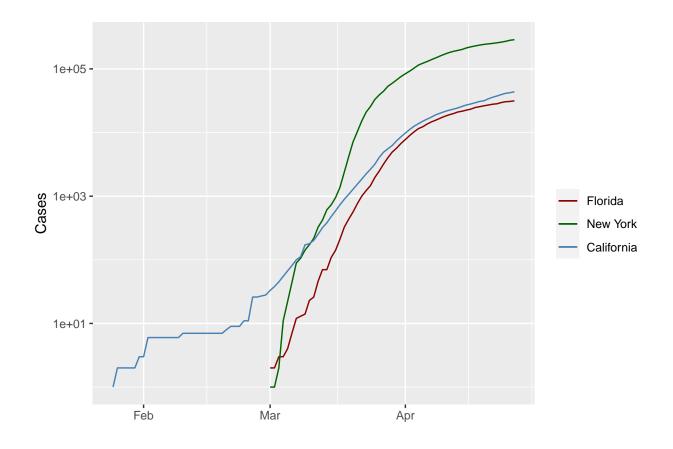
florida_df

##		date	gtata	fine	CAGAG	deaths
##	243	2020-03-01	Florida	12	2	0
##	256	2020-03-02	Florida	12	2	0
##	271	2020-03-03	Florida	12	3	0
##	287	2020-03-04	Florida	12	3	0
##	305	2020-03-05	Florida	12	4	0
##	326	2020-03-06	Florida	12	7	2
##	355	2020-03-07	Florida	12	12	2
##	389	2020-03-08	Florida	12	13	2
##	424	2020-03-09	Florida	12	14	2
##	461	2020-03-10	Florida	12	23	2
##	502	2020-03-11	Florida	12	26	2
##	548	2020-03-12	Florida	12	46	2
##	596	2020-03-13	Florida	12	70	2
##	647	2020-03-14	Florida	12	70	3
##	699	2020-03-15	Florida	12	109	3
##	752	2020-03-16	Florida	12	141	4
##	805	2020-03-17	Florida	12	210	6
##	859	2020-03-18	Florida	12	326	7
##	913	2020-03-19	${\tt Florida}$	12	434	8
##	967	2020-03-20	${\tt Florida}$	12	564	9
##	1021	2020-03-21	${\tt Florida}$	12	764	11
##	1075	2020-03-22	${\tt Florida}$	12	1000	13
##	1129	2020-03-23	${\tt Florida}$	12	1222	18
##	1183	2020-03-24	${\tt Florida}$	12	1467	19
##	1237	2020-03-25	${\tt Florida}$	12	1965	23
##	1291	2020-03-26	${\tt Florida}$	12	2477	29
##	1345	2020-03-27	${\tt Florida}$	12	3198	46
##	1399	2020-03-28	Florida	12	4038	56
##	1454	2020-03-29	Florida	12	4942	59
##	1509	2020-03-30	Florida	12	5694	71
##	1564	2020-03-31	Florida	12	6741	85
##	1619	2020-04-01	Florida	12	7765	100
##	1674	2020-04-02	Florida	12	9000	144
##	1729	2020-04-03	Florida	12	10260	169
##	1784	2020-04-04		12	11537	194
##	1839	2020-04-05	Florida	12	12342	220
##	1894	2020-04-06	Florida	12	13621	253
##	1949	2020-04-07	Florida	12	14739	295

```
## 2004 2020-04-08 Florida 12 15690
                                        322
## 2059 2020-04-09 Florida 12 16819
                                        370
## 2114 2020-04-10 Florida 12 17960
                                        418
## 2169 2020-04-11 Florida 12 18978
                                        445
## 2224 2020-04-12 Florida 12 19855
                                        460
## 2279 2020-04-13 Florida 12 21011
                                        498
## 2334 2020-04-14 Florida 12 21620
                                        570
## 2389 2020-04-15 Florida 12 22526
                                        613
## 2444 2020-04-16 Florida 12 23332
                                        667
## 2499 2020-04-17 Florida 12 24745
                                        725
## 2554 2020-04-18 Florida 12 25484
                                        747
## 2609 2020-04-19 Florida 12 26306
                                        773
## 2664 2020-04-20 Florida 12 27050
                                        822
## 2719 2020-04-21 Florida 12 27861
                                        866
## 2774 2020-04-22 Florida 12 28301
                                        926
## 2829 2020-04-23 Florida 12 29640
                                        986
## 2884 2020-04-24 Florida 12 30525
                                       1045
## 2939 2020-04-25 Florida 12 30831
                                       1054
## 2994 2020-04-26 Florida 12 31520
                                       1073
```

include=FALSE

NY Times COVID-19 Data

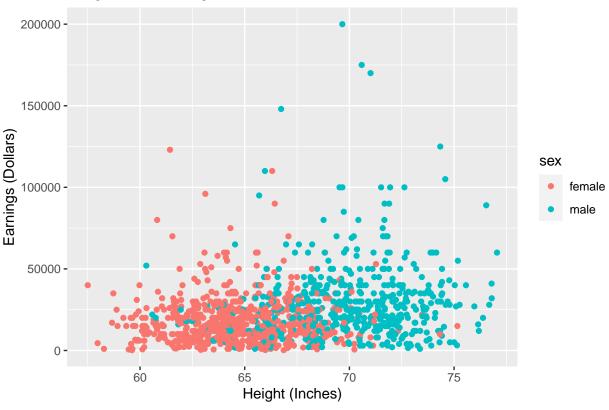


echo=FALSE

R4DS Height vs Earnings

```
ggplot(heights_df, aes(x=height, y=earn, col=sex)) + geom_point() + ggtitle('Height vs. Earnings') + xl
```





echo=FALSE

Tables

Knitr Table with Kable

```
library(tinytex)
name <- c("Aragon", "Bilbo", "Frodo", "Galadriel", "Sam", "Gandalf", "Legolas", "Sauron",
race <- c("Men", "Hobbit", "Hobbit", "Hobbit", "Maia", "Elf", "Maia", "Hobbit")
in_fellowship <- c(TRUE, FALSE, TRUE, FALSE, TRUE, TRUE, TRUE, FALSE, FALSE)
ring_bearer <- c(FALSE, TRUE, TRUE, FALSE, TRUE, TRUE, FALSE, TRUE, TRUE)
age <- c(88, 129, 51, 7000, 36, 2019, 2931, 7052, 589)
characters_df <- data.frame(name, race, in_fellowship, ring_bearer, age)
knitr::kable(characters_df[ , ], caption = 'One Ring to Rule Them All')</pre>
```

Table 1: One Ring to Rule Them All

name	race	$in_fellowship$	ring_bearer	age
Aragon	Men	TRUE	FALSE	88
Bilbo	Hobbit	FALSE	TRUE	129
Frodo	Hobbit	TRUE	TRUE	51

name	race	$in_fellowship$	ring_bearer	age
Galadriel	Elf	FALSE	FALSE	7000
Sam	Hobbit	TRUE	TRUE	36
Gandalf	Maia	TRUE	TRUE	2019
Legolas	Elf	TRUE	FALSE	2931
Sauron	Maia	FALSE	TRUE	7052
Gollum	Hobbit	FALSE	TRUE	589

Pandoc Table

name	race	$in_fellowship$	$ring_bearer$	age
Aragon	Men	TRUE	FALSE	88
Bilbo	Hobbit	FALSE	TRUE	129
Frodo	Hobbit	TRUE	TRUE	51
Galadriel	Elf	FALSE	FALSE	7000
Sam	Hobbit	TRUE	TRUE	36
Gandalf	Maia	TRUE	TRUE	2019
Legolas	Elf	TRUE	FALSE	2931
Sauron	Maia	FALSE	TRUE	7052
Gollum	Hobbit	FALSE	TRUE	589

References

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.