Assignment 3

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```
rm(list = ls())

suppressPackageStartupMessages(library(tidyverse))
suppressPackageStartupMessages(library(gdata))
suppressPackageStartupMessages(library(httr))
suppressPackageStartupMessages(library(jsonlite))
```

```
# Found code at: https://stackoverflow.com/questions/35120167/convert-json-url-to-r-data-f

df <- fromJSON("https://static01.nyt.com/newsgraphics/2021/12/20/us-coronavirus-deaths-202
```

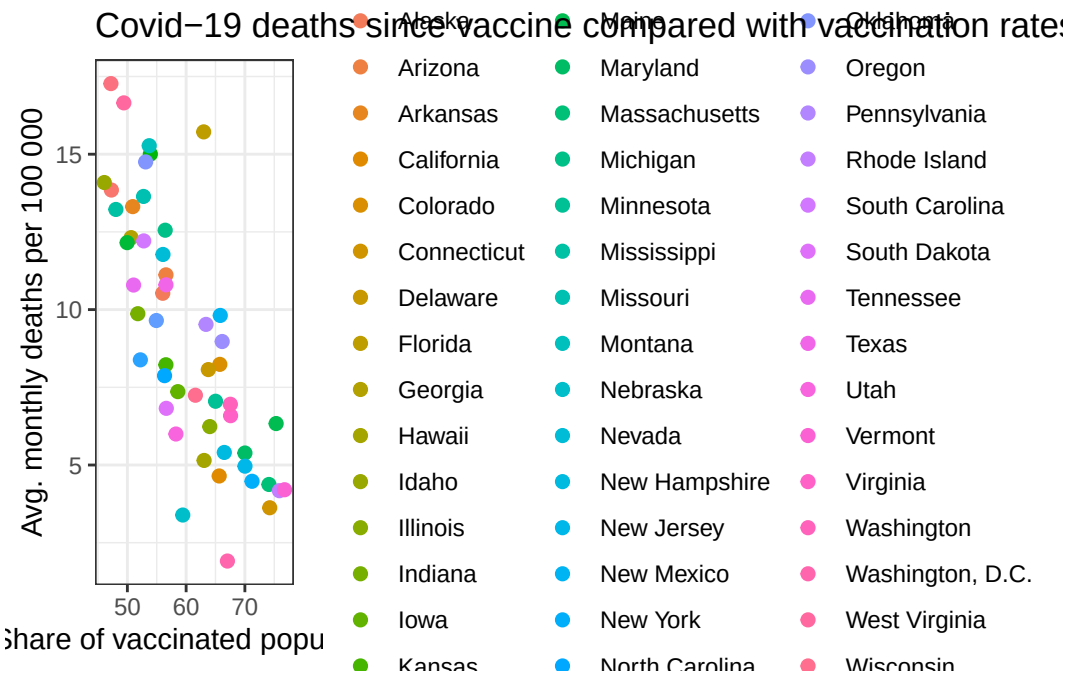
```
df <- mutate(df, percent_share = fully_vaccinated_pct_of_pop*100)
```

```
  ggplot(data=df, aes(x = percent_share, y = deaths_per_100k, color=name)) +

  geom_point(size=2) +

  labs (title = "Covid-19 deaths since vaccine compared with vaccination rates", y = "Avg.

  theme_bw()
```



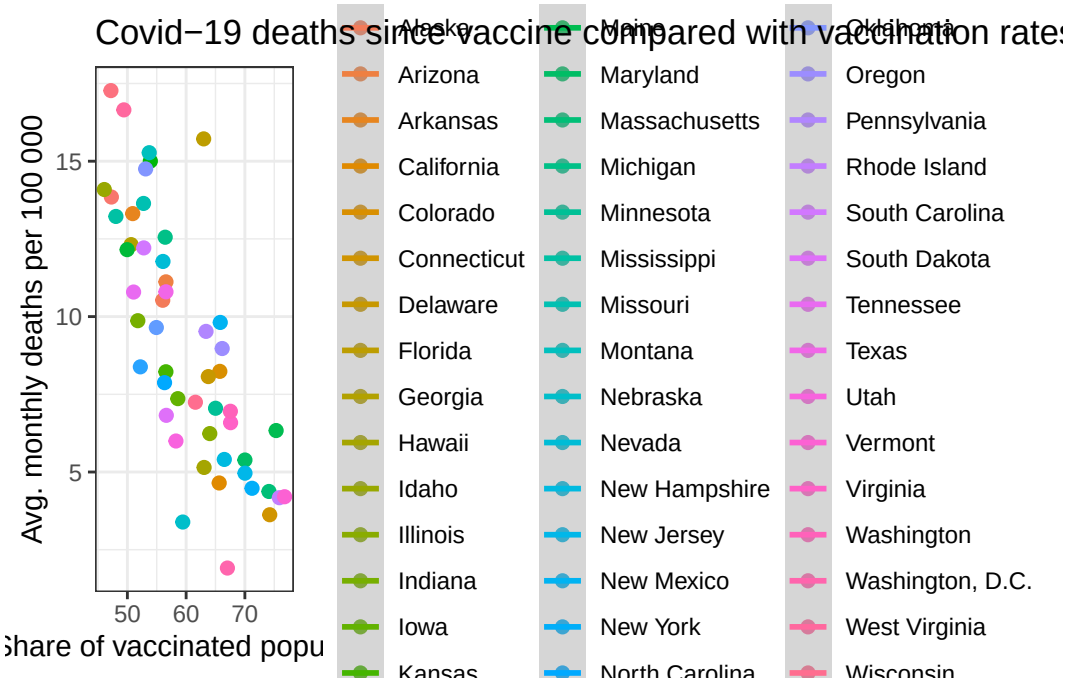

```
lm(deaths_per_100k ~ percent_share, data=df)
```

```
Call:
lm(formula = deaths_per_100k ~ percent_share, data = df)

Coefficients:
  (Intercept)  percent_share
      31.1485        -0.3666
```

```
ggplot(data=df, aes(x = percent_share, y = deaths_per_100k, color=name)) +
  geom_point(size=2) +
  geom_smooth(method = lm) +
  labs (title = "Covid-19 deaths since vaccine compared with vaccination rates", y = "Avg.
  theme_bw()
```

```
`geom_smooth()` using formula = 'y ~ x'
```


Covid−19 deaths since vaccine compared with vaccination rates
Avg. monthly deaths per 100 000
15
10
5
50
60
70
Share of vaccinated popu
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
Washington, D.C.
West Virginia
Wisconsin