

Homework5_KSalmons

Kaytlyn Salmons

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```
knitr::opts_chunk$set(echo = TRUE)
library(tigris)
```

```
## To enable caching of data, set 'options(tigris_use_cache = TRUE)'
## in your R script or .Rprofile.
```

```
library(dplyr)
```

```
##
```

```
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
```

```
##
```

```
## filter, lag
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
## intersect, setdiff, setequal, union
```

```
library(sf)
```

```
## Linking to GEOS 3.9.1, GDAL 3.4.3, PROJ 7.2.1; sf_use_s2() is TRUE
```

```
library(ggplot2)
library(stats)
library(ggthemes)
library(forcats)
library(scales)
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.2 --
```

```
## v tibble 3.1.8      v purrr 0.3.5
```

```
## v tidyr 1.2.1       v stringr 1.4.1
```

```
## v readr 2.1.3
```

```
## -- Conflicts ----- tidyverse_conflicts() --
```

```
## x readr::col_factor() masks scales::col_factor()
```

```
## x purrr::discard()    masks scales::discard()
```

```
## x dplyr::filter()     masks stats::filter()
```

```
## x dplyr::lag()        masks stats::lag()
```

```
homicides <- read.csv(url("https://raw.githubusercontent.com/washingtonpost/data-homicides/master/homicides"))
```

```
homicides$disp_unsolved = (homicides$disposition != "Closed by arrest")
head(homicides)
```

```
##      uid reported_date victim_last victim_first victim_race victim_age
## 1 Alb-000001    20100504      GARCIA        JUAN    Hispanic        78
## 2 Alb-000002    20100216     MONTOYA      CAMERON    Hispanic        17
## 3 Alb-000003    20100601 SATTERFIELD    VIVIANA      White         15
## 4 Alb-000004    20100101     MENDIOLA      CARLOS    Hispanic        32
## 5 Alb-000005    20100102        MULA      VIVIAN      White         72
## 6 Alb-000006    20100126        BOOK    GERALDINE      White         91
##  victim_sex      city state      lat      lon      disposition
## 1      Male Albuquerque    NM 35.09579 -106.5386 Closed without arrest
## 2      Male Albuquerque    NM 35.05681 -106.7153      Closed by arrest
## 3     Female Albuquerque    NM 35.08609 -106.6956 Closed without arrest
## 4      Male Albuquerque    NM 35.07849 -106.5561      Closed by arrest
## 5     Female Albuquerque    NM 35.13036 -106.5810 Closed without arrest
## 6     Female Albuquerque    NM 35.15111 -106.5378      Open/No arrest
##  disp_unsolved
## 1          TRUE
## 2         FALSE
## 3          TRUE
## 4         FALSE
## 5          TRUE
## 6          TRUE
```

```
Philly_killy <-
  filter(homicides, city=="Philadelphia")
```

```
Phil_map <- tracts("PA", "Philadelphia")
```

```
## Retrieving data for the year 2020
```

```
## |
## |
philly <- ggplot() +
  geom_sf(data = Phil_map) +
  geom_point(data = Philly_killy, size=0.4, aes(x=lon, y=lat, col= fct_lump(victim_race, n=3))) +
  labs(x = "Longitude", y = "Latitude", title= "Homicides in Philadelphia", col = "Victim Race")+
  theme_few()
philly_labels <- as_labeller(c('FALSE' = "Solved",
  'TRUE' = "Unsolved"))
philly + facet_wrap(~disp_unsolved, ncol = 1, labeller = philly_labels)
```

```
## Warning: Removed 1 rows containing missing values (geom_point).
```

Homicides in Philadelphia

