Homework 5

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11/30/2022

```r
library(tidyr)
library(readr)
library(stats)
library(dplyr)
library(ggplot2)
library(forcats)
library(scales)
library(sf)
library(tigris)
library(forcats)
```

Read in data

```r
list.files(path = "../data")
```

```
## [1] "homicide-data.csv"
```

```r
hom <- read_csv("../data/homicide-data.csv")
#head(hom)
```

Clean data

```r
hom_all <- hom %>%
  filter(city == "Denver") %>%
  select(lat, lon, disposition, victim_race)%>%
    mutate(Disposition = fct_recode(disposition, Unsolved = "Closed without arrest", Unsolved =  "Open/I
  group_by(Disposition) %>%
  mutate(Race = fct_lump_n(victim_race, n =3)) %>%
  select(lat, lon, Disposition, Race) %>%
  group_by(Race)
#head(hom_all)

hom_all_sf <- st_as_sf(hom_all, coords = c("lon", "lat")) %>%
  st_set_crs(4269)
#homicides_clean %>% slice(1:3)
```

```
co_counties <- counties(state = "CO", cb = TRUE, class = "sf")
```

```
##   |                                                              |
```

```
den_county <- co_counties %>%
  filter(NAME == "Denver")
```

Graph data

```
ggplot() +
 geom_sf(data = den_county, color = "lightgray") +
 geom_sf(data = hom_all_sf) +
  geom_point(data=hom_all, aes(x= lon, y = lat, color = Race), size = 0.7) +
  scale_y_continuous(breaks = seq(39.6, 39.9, by = .1)) +
 scale_x_continuous(breaks = seq(-105.1, -104.6, by = .1)) +
   labs(x = "Latitude", y = "Longitude", title = ("Homicide Cases in Denver County"), color = "Race of
 facet_wrap(~ Disposition, ncol = 2) +
   theme(axis.text = element_text(size = 7), panel.spacing = unit(1.2, "lines"), legend.text = element_
```
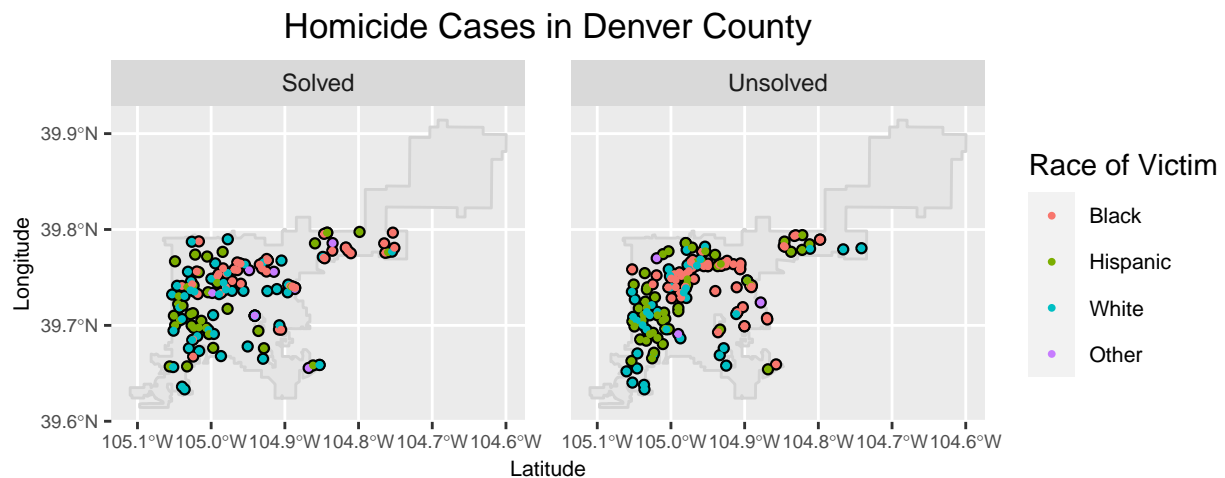
```
ggsave("../figures/fig.tiff", width = 2600,
  height = 1100,
 units = c("px"))
dev.off()
```

```
## null device
##           1
```