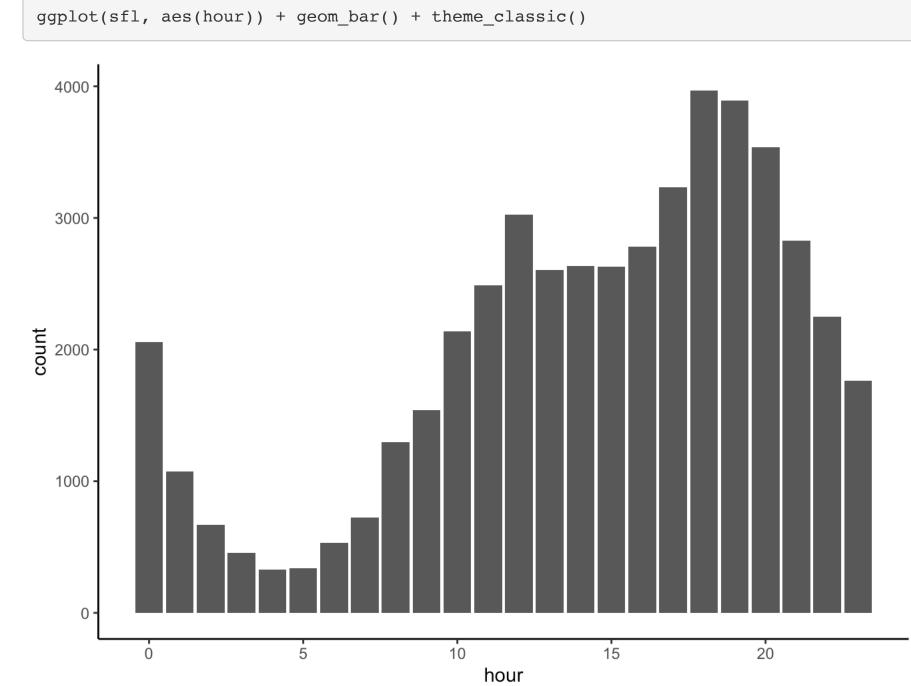
San Fransisco Larcency Crimes

Tadros Salama 12/5/2020

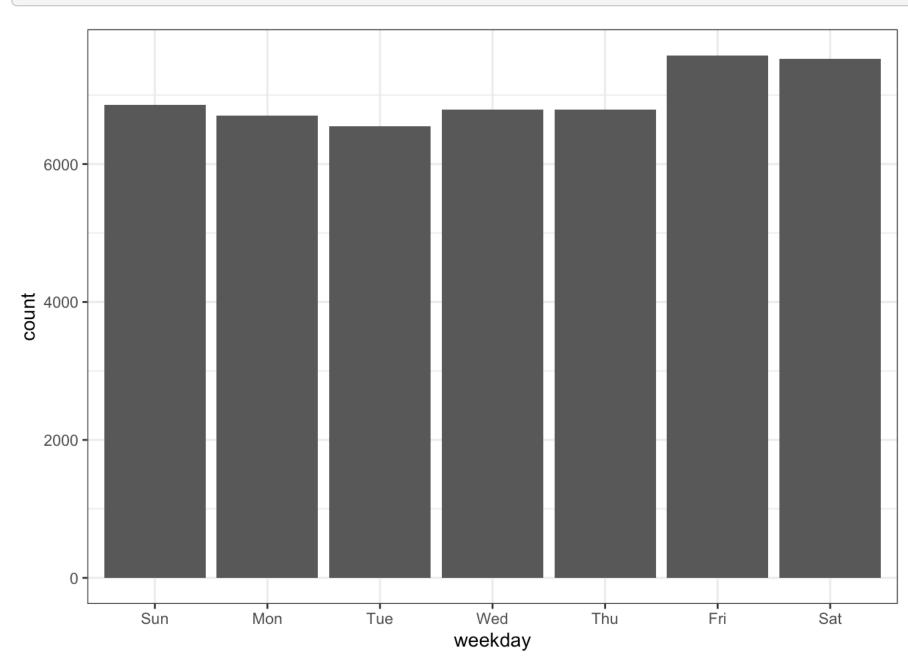
Amount of larcency crimes in San Fransisco during the whole year of 2018.

```
sfl <- tibble(
date = date(t),
month = month(t, label = T), weekday = wday(t, label = T), hour = hour(t)
sfl
## # A tibble: 48,789 x 4
      <date>
                <ord> <ord>
                              <int>
## 1 2018-10-05 Oct
                                16
                                15
## 2 2018-10-05 Oct
## 3 2018-06-01 Jun
## 4 2018-10-06 Oct
## 5 2018-10-06 Oct
## 6 2018-10-06 Oct
                                10
## 7 2018-10-06 Oct
                                16
## 8 2018-10-06 Oct
                                15
## 9 2018-10-06 Oct
                                18
## 10 2018-10-06 Oct Sat
                                16
## # ... with 48,779 more rows
```

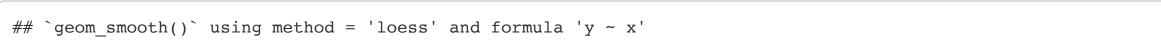


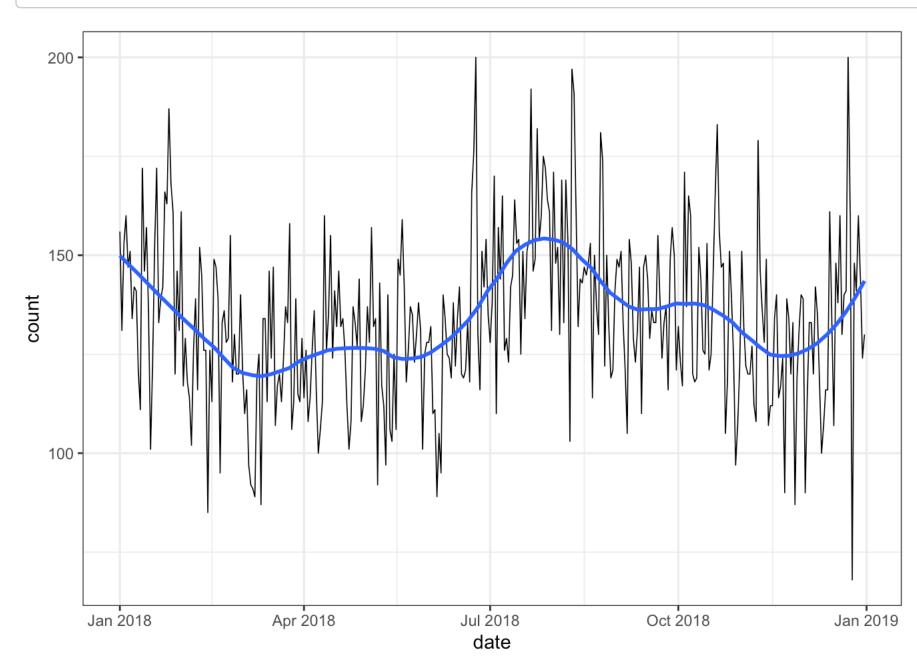


(d)



```
sfl_daily <- sfl %>% group_by(date) %>% summarize(count = n())
ggplot(sfl_daily, aes(x=date, y=count)) + geom_line(size=0.3) +
geom_smooth(span = 0.3, se = FALSE) + theme_bw()
```





Bar plot **(c)** of the hourly larceny thefts, shows a concentration of thefts between 5:00pm - 8:00pm. Since that is the typical period people leave work, a majority of these thefts could be targeting commuters.

```
dec_sfl <- sfl %>% group_by(date, month) %>% summarise(count = n()) %>%
    filter(month == 'Dec')

## `summarise()` has grouped output by 'date'. You can override using the `.groups` argument.

ggplot(dec_sfl, aes(x=date, y=count)) + geom_line(size=0.5) +
geom_smooth(span = 0.5, se = FALSE) + theme_bw()

## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

