

# EDLD652\_lab4

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```
library(here)
library(tidyverse)
library(colorblindr)
library(gghighlight)
library(khroma)
library(colorblindcheck)
```

```
honey <- read_csv(here("data", "honeyproduction.csv"))
```

## Load Data

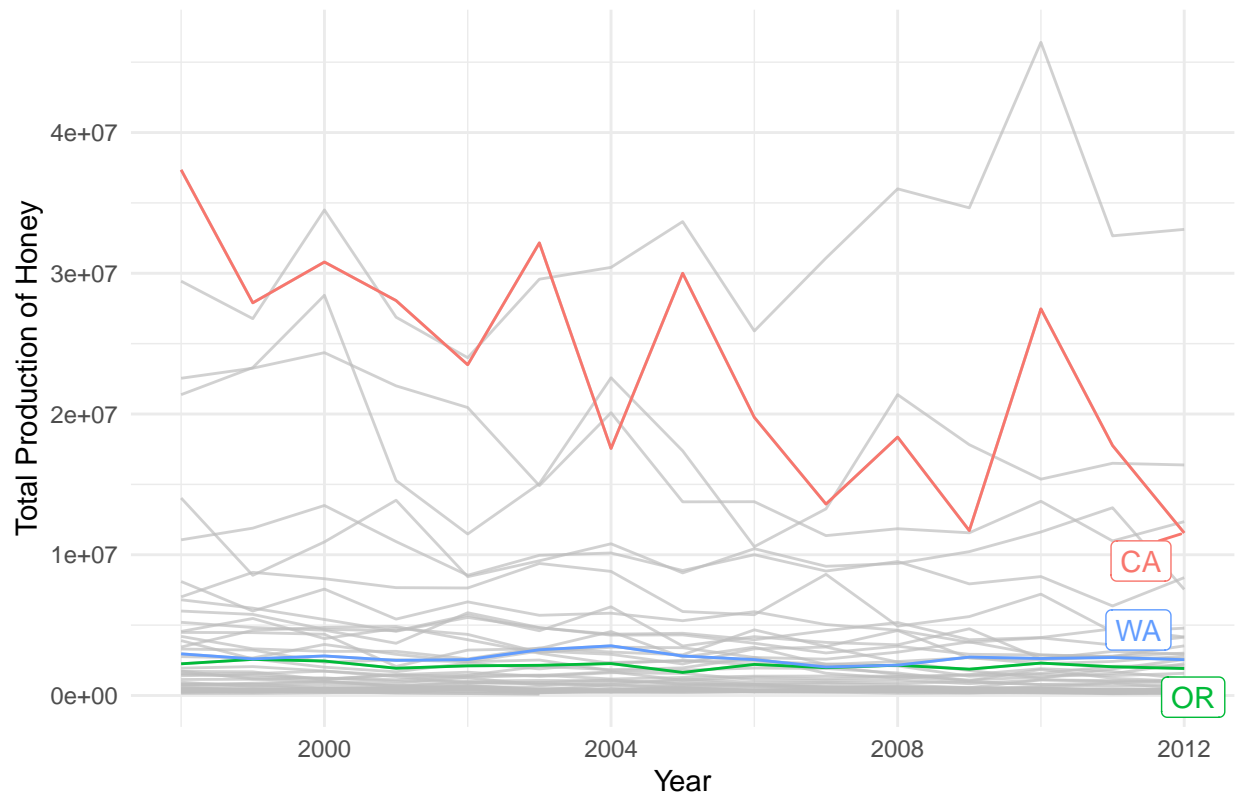
## Wrangle Data

1. Visualize the total production of honey across years by state Plot 1

```
west_coast <- c("WA", "OR", "CA")
```

```
honey %>%
  ggplot(aes(x = year, y = totalprod, color = state)) + geom_line() +
  gghighlight(state %in% west_coast,
              use_direct_label = TRUE,
              label_key = state) +
  labs(title = "Total Production of Honey Across years by State",
       x = "Year",
       y = "Total Production of Honey") +
  theme_minimal()
```

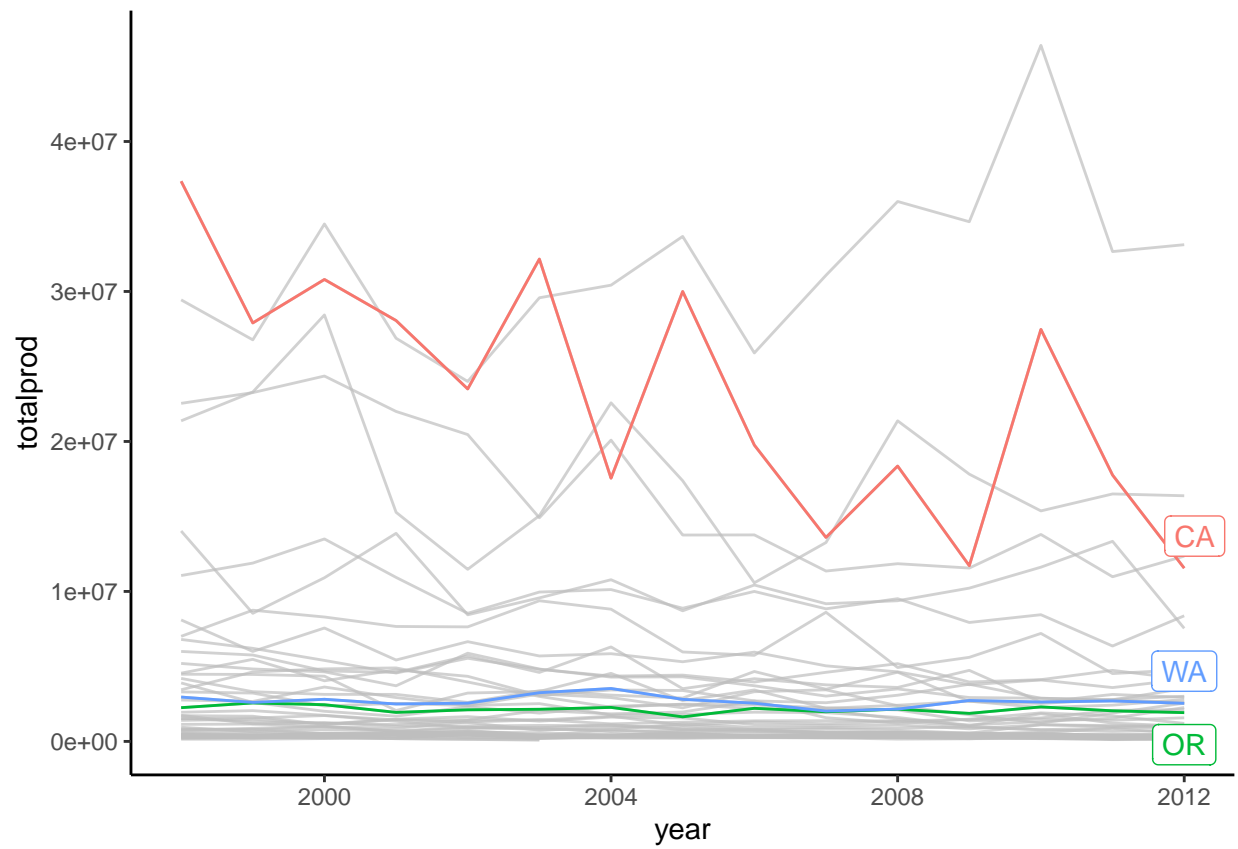
Total Production of Honey Across years by State



2. Reproduce the plot according three different kinds of color blindness (Deutanomaly, Protanomaly, Tritanomaly, and Desaturated)

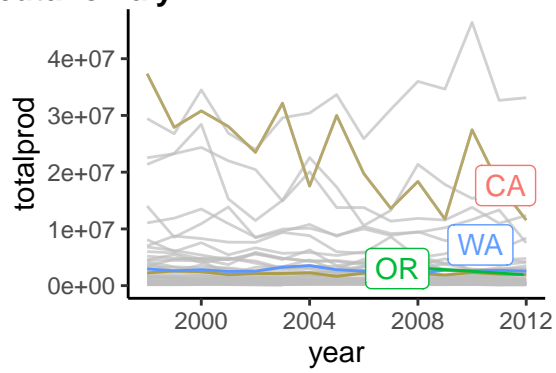
```
p <- ggplot(honey,
  aes(x = year, y = totalprod, color = state)) +
  geom_line() +
  gghighlight(state %in% west_coast,
    use_direct_label = TRUE,
    label_key = state)+
  theme_classic()

p+
  scale_fill_OkabeIto()
```

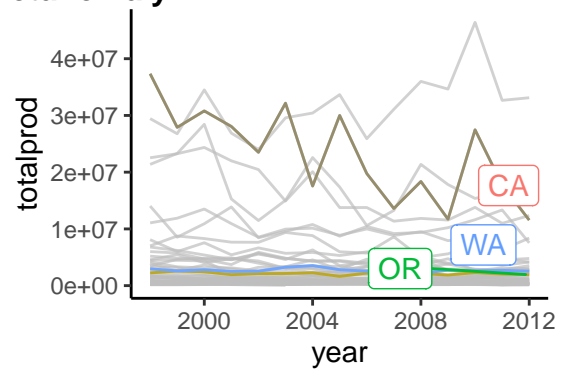


`cvd_grid(p)`

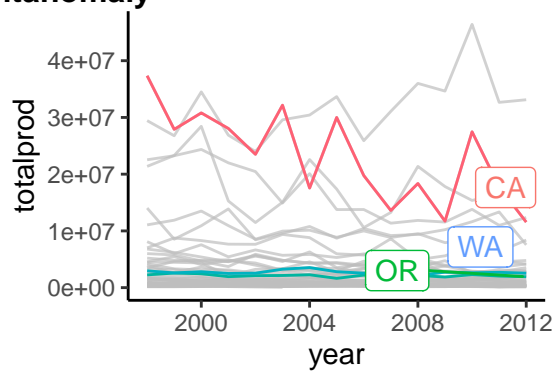
**Deutanomaly**



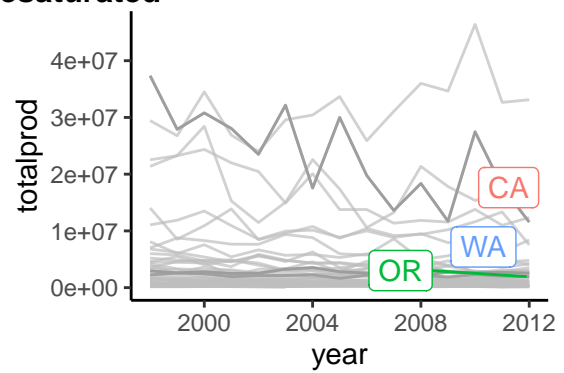
**Protanomaly**



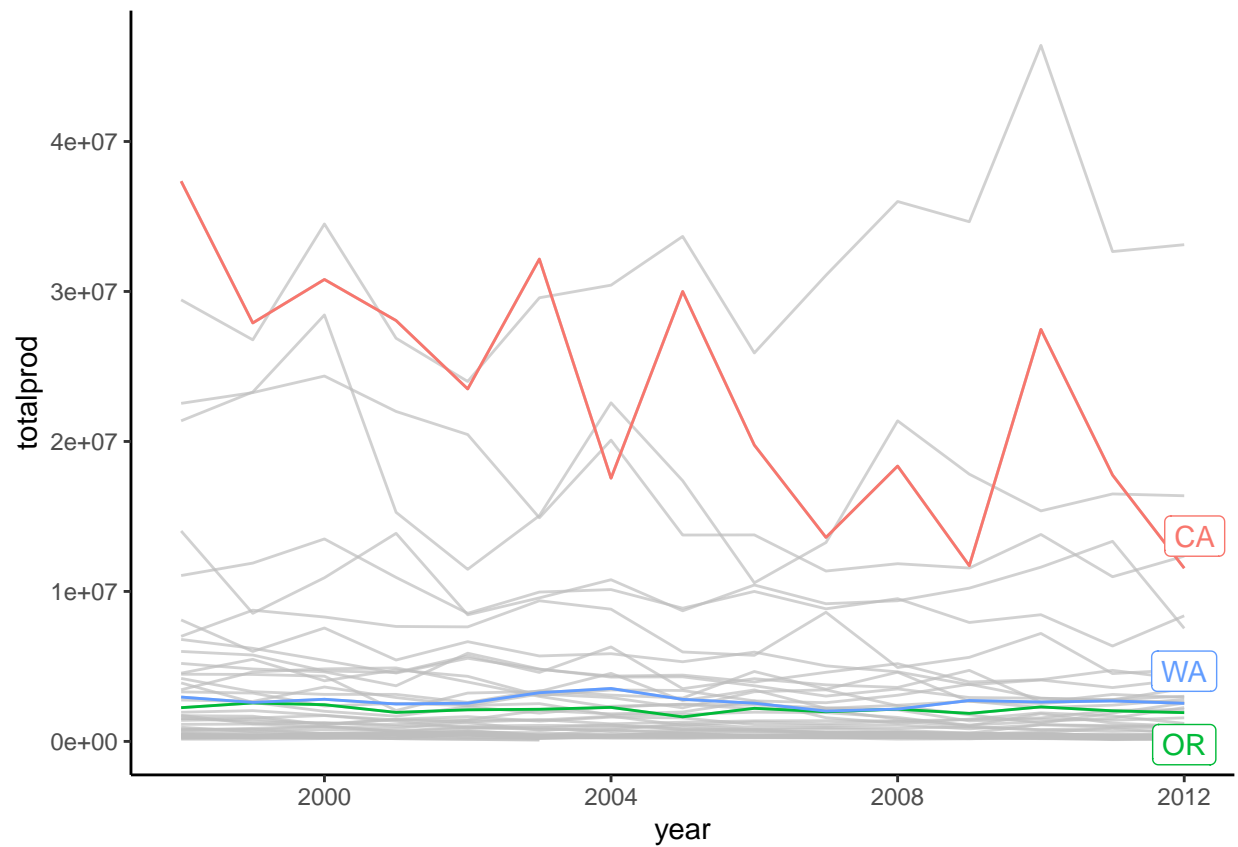
**Tritanomaly**



**Desaturated**



```
p+  
scale_fill_manual(values = colour("bright"))
```



3. Reproduce the plot using a color blind safe palette.

```
p +  
  scale_color_viridis_d(option = "plasma")
```

