Tidy Tuesday - Week 1

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Task at hand

For this week, I will be looking at the #DuBoisChallenge taken from here. I would like to complete challenges 1 and 3.

Challenge 01

Comparative Increase of White and Colored Population in Georgia

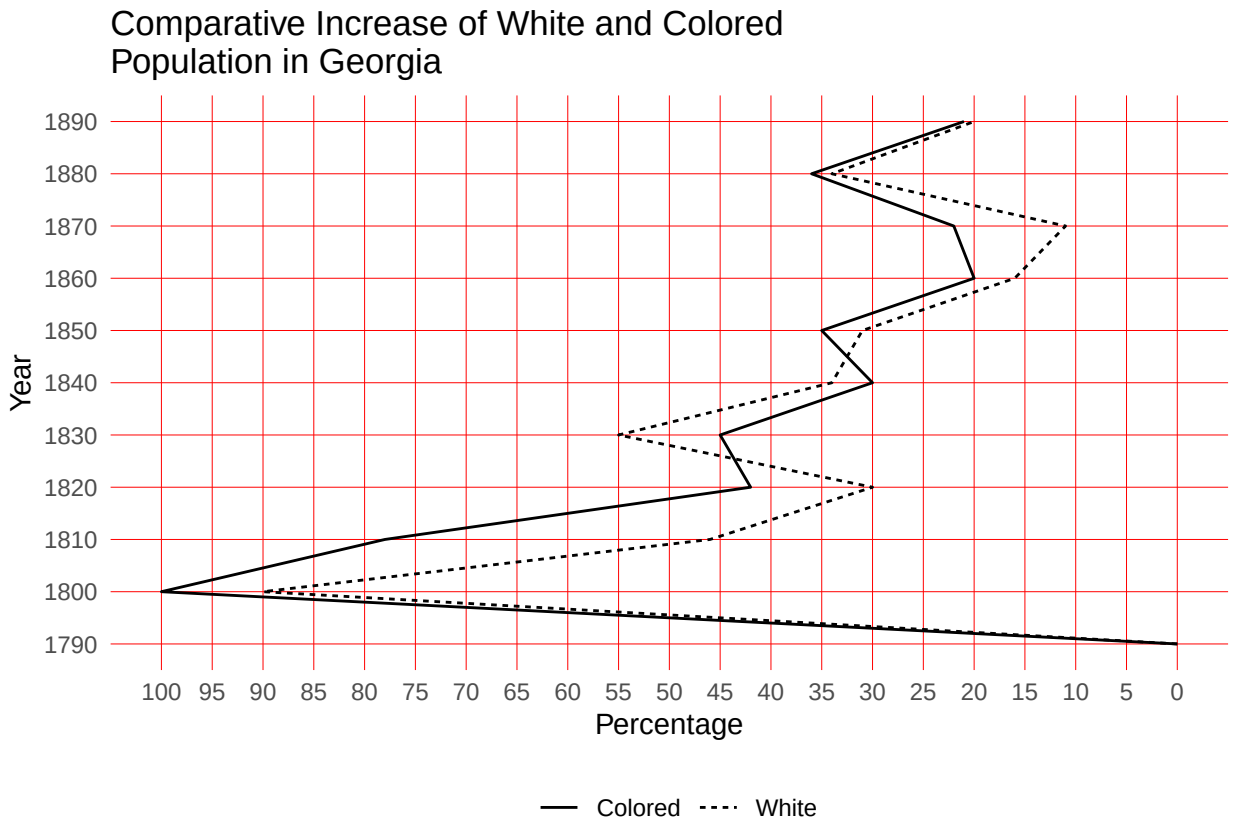
Data Wrangling

```
georgia_pop <- georgia_pop_raw %>%
  pivot_longer(!Year, names_to = "Group", values_to = "Percentage") %>%
  mutate(Group = as_factor(Group))
```

Data Visualization

```
options(repr.plot.width=500, repr.plot.height=800)

ggplot(data = georgia_pop, aes(x = Year, y = Percentage, group = Group)) +
  geom_line(aes(linetype = Group)) +
  scale_x_continuous(breaks = seq(1790, 1890, by = 10)) +
  scale_y_reverse(breaks = seq(0, 100, by = 5)) +
  labs(
    title = "Comparative Increase of White and Colored\nPopulation in Georgia",
    xlab = "Year",
    ylab = "Percentage"
  ) +
  theme_minimal() +
  theme(
    legend.title = element_blank(),
    panel.grid.major = element_line(size = 0.1, linetype = 'solid', colour = "red"),
    panel.grid.minor = element_blank(),
    legend.position = "bottom") +
  coord_flip()
```



Challenge 03

Occupations of Negroes and Whites in Georgia

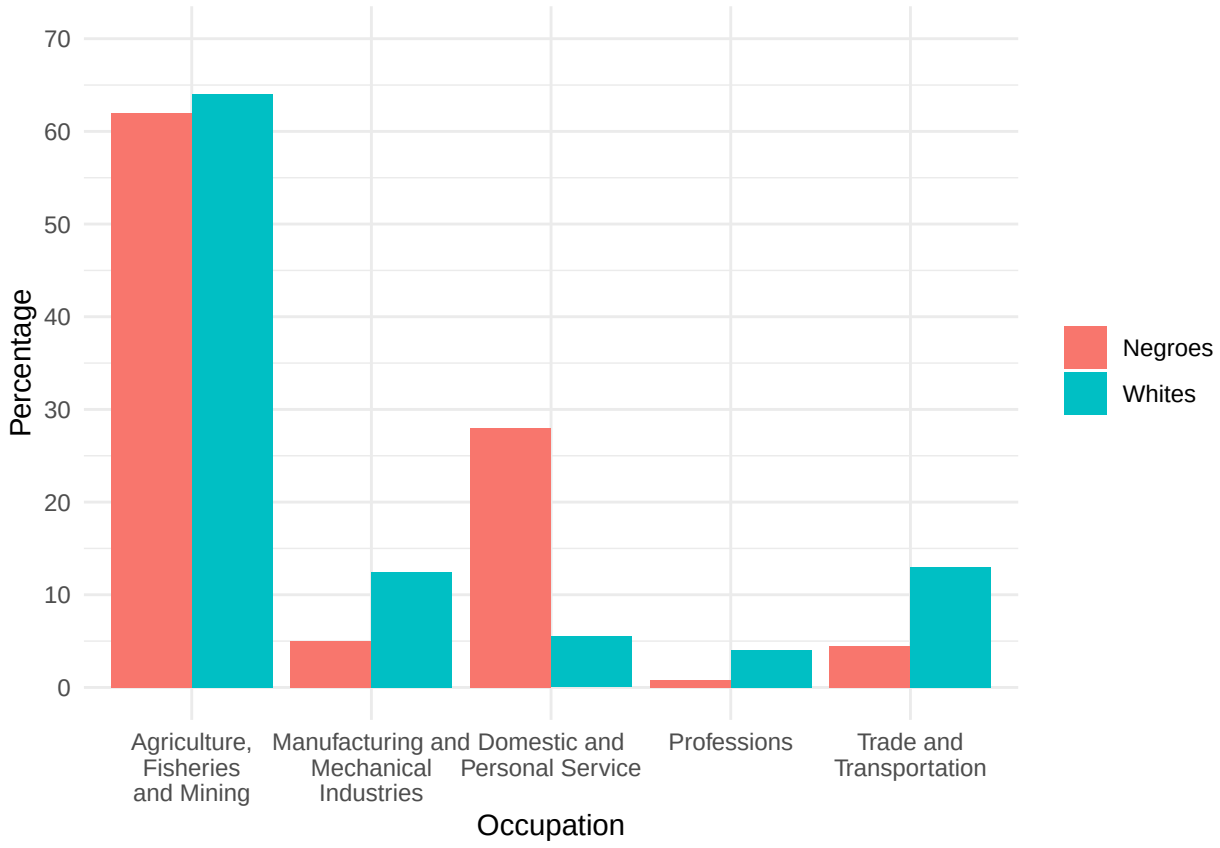
Data Wrangling

```
occupation <- occupation_raw %>%
  mutate(Group = as_factor(Group), Occupation = as_factor(Occupation))

levels(occupation$Occupation)
```

```
## [1] "Agriculture, Fisheries and Mining"
## [2] "Manufacturing and Mechanical Industries"
## [3] "Domestic and Personal Service"
## [4] "Professions"
## [5] "Trade and Transportation"
```

```
ggplot(data = occupation, aes(x = Occupation, y = Percentage, fill = Group)) +
  geom_bar(stat = "identity", position="dodge") +
  scale_y_continuous(breaks = seq(0, 70, by=10), limits = c(0, 70)) +
  scale_x_discrete(
    labels = c("Agriculture,\nFisheries\nand Mining", "Manufacturing and\nMechanical\nIndustries", "Dom
  theme_minimal() +
  theme(legend.title = element_blank())
```


70
60
50
40
30
20
10
0
Percentage
Agriculture, Fisheries and Mining
Manufacturing and Mechanical Industries
Domestic and Personal Service
Professions
Trade and Transportation
Occupation
Negroes
Whites