Week5 Assignment

2024-02-12

```
# Load the TidyTuesday dataset for the specified date ('2024-02-13') using the tt_load() function from
tuesdata <- tidytuesdayR::tt_load('2024-02-13')
```

```
## --- Compiling #TidyTuesday Information for 2024-02-13 ----

## --- There are 3 files available ---

## --- Starting Download ---

##
##  Downloading file 1 of 3: `historical_spending.csv`
##  Downloading file 2 of 3: `gifts_age.csv`
##  Downloading file 3 of 3: `gifts_gender.csv`

## --- Download complete ---
```

```
# Access the historical spending dataset from the loaded TidyTuesday data.
historical_spending <- tuesdata$historical_spending
```

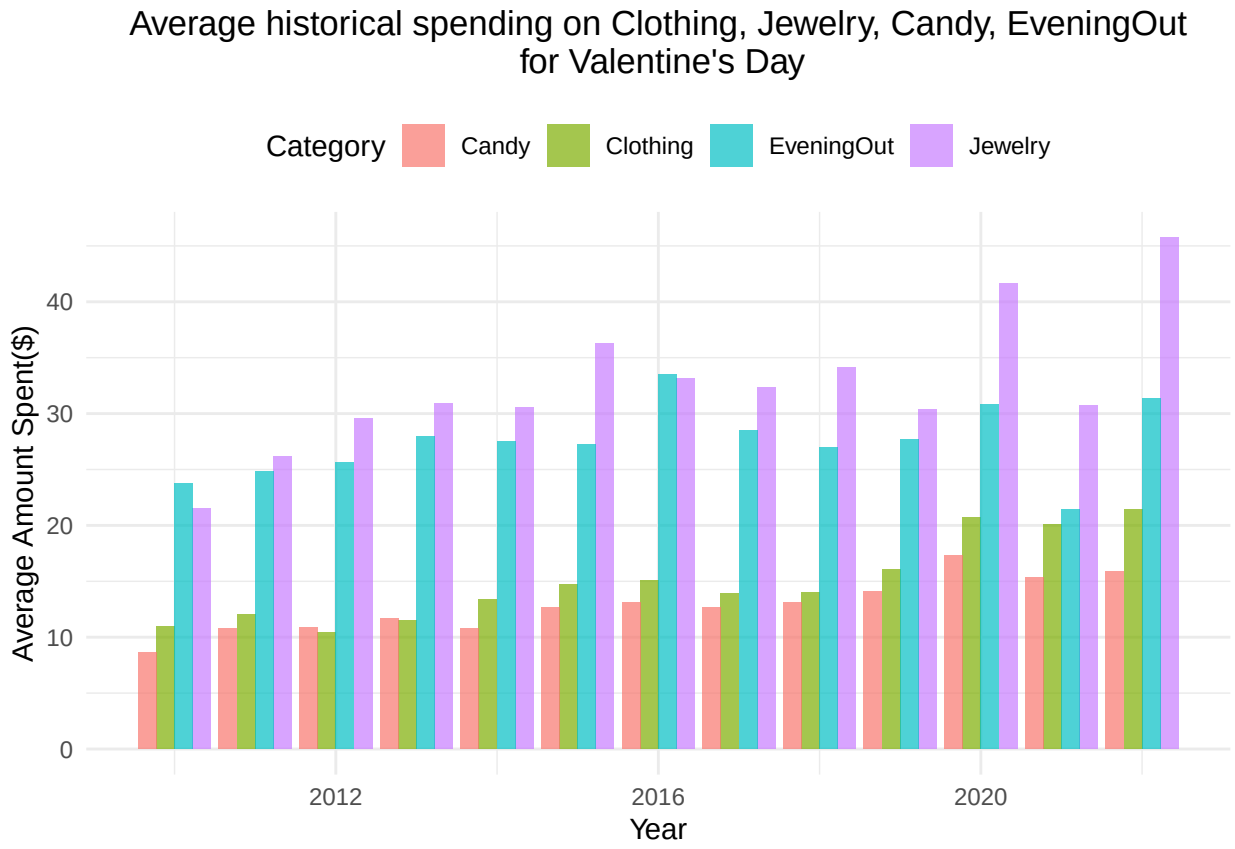
```
# Display the first few rows of the historical_spending dataset
head(historical_spending)
```

```
## # A tibble: 6 x 10
##    Year PercentCelebrating PerPerson Candy Flowers Jewelry GreetingCards
##   <dbl>              <dbl>     <dbl> <dbl>   <dbl>   <dbl>         <dbl>
## 1  2010                 60       103   8.6    12.3    21.5          5.91
## 2  2011                 58       116.  10.8    12.6    26.2          8.09
## 3  2012                 59       126.  10.8    13.5    29.6          6.93
## 4  2013                 60       131.  11.6    13.5    30.9          8.32
## 5  2014                 54       134.  10.8    15      30.6          7.97
## 6  2015                 55       142.  12.7    15.7    36.3          7.87
## # i 3 more variables: EveningOut <dbl>, Clothing <dbl>, GiftCards <dbl>
```

```
# Pivot the historical_spending dataset from wide to long format using pivot_longer() function
# This converts the columns 'Clothing', 'Jewelry', 'Candy', and 'EveningOut' into rows, with a new colu
df <- historical_spending %>%
  pivot_longer(cols = c(Clothing, Jewelry, Candy, EveningOut),
               names_to = "variable", values_to = "value")

# Create a grouped bar plot using ggplot2
# The x-axis represents the years, the y-axis represents the average spending amount, and the bars are
```

```r
ggplot(data = df, aes(x = Year, y = value, fill = variable)) +
  geom_col(position = "dodge", alpha = 0.7) +
  labs(title = "Average historical spending on Clothing, Jewelry, Candy, EveningOut\n for Valentine's Da
       x = "Year",
       y = "Average Amount Spent($)",
       fill = "Category") +
  theme_minimal() +
  theme(legend.position = "top",
        legend.justification = "center",
        plot.title = element_text(hjust = 0.5,margin = margin(b = 10)))
```



Story:

Average historical spending on Clothing, Jewelry, Candy and an evening out for Valentine's Day

Observation:

It can be observed that the highest spending for a Valentine's day typically occurs on jewelry, followed by dining out, clothing, and candy, in that order.