Assignment_Barry_TV_show

Tab 1: Introduction

Barrry is an American dark comedy-crime television series created by Alec Berg and Bill Hader that premiered on HBO. It stars Hader as the titular character, a hitman from the Midwest who travels to Los Angeles to kill someone and then finds himself joining an acting class taught by Henry Winkler's character.

Tab 2: Viewership Statistics

Here is a summary of some basic statistics on viewership (in Millions):

```
# Create a data frame with the viewership data
barry_data <- data.frame(
  episode = c(1:28),
  viewers = c(0.564, 0.641, 0.595, 0.511, 0.643, 0.560, 0.636, 0.548, 0.532, 0.424, 1.78,
)

# Calculate the mean, median, minimum, maximum, and standard deviation
mean_viewers <- mean(barry_data$viewers)
median_viewers <- median(barry_data$viewers)
min_viewers <- min(barry_data$viewers)
max_viewers <- max(barry_data$viewers)
sd_viewers <- sd(barry_data$viewers)

# Display the statistics
cat("Mean viewership: ", mean_viewers, "\n")
```

```
Mean viewership:  0.7334286
```

Figure 1: Barry shot

```
  cat("Median viewership: ", median_viewers, "\n")
```

```
Median viewership:  0.5215
```

```
  cat("Minimum viewership: ", min_viewers, "\n")
```

```
Minimum viewership:  0.208
```

```
  cat("Maximum viewership: ", max_viewers, "\n")
```

```
Maximum viewership:  2.21
```

```
  cat("Standard deviation of viewership: ", sd_viewers, "\n")
```

```
Standard deviation of viewership:  0.6767498
```

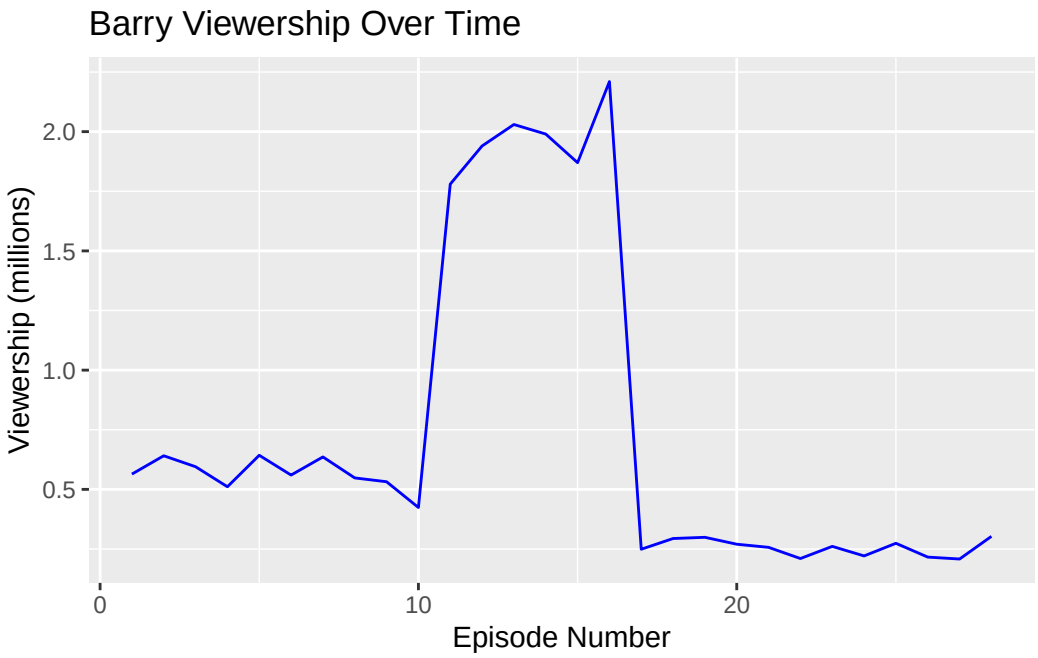
Tab 3: Viewership Over Time

3. Create a graph of viewership over time:

```
  library(ggplot2)
  library(tidyverse)
```

```
-- Attaching packages --------------------------------------- tidyverse 1.3.2 --
v tibble  3.1.8      v dplyr   1.0.10
v tidyr   1.2.1      v stringr 1.5.0
v readr   2.1.3      v forcats 0.5.2
v purrr   1.0.0
-- Conflicts ------------------------------------------ tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()    masks stats::lag()
```

```r
ggplot(barry_data, aes(x = episode, y = viewers)) +
  geom_line(color = "blue") +
  labs(x = "Episode Number", y = "Viewership (millions)", title = "Barry Viewership Over T
```



Tab 4: Episode-to-Episode Changes

4. The graph of the episode-to-episode (or season-to-season) changes in viewership:

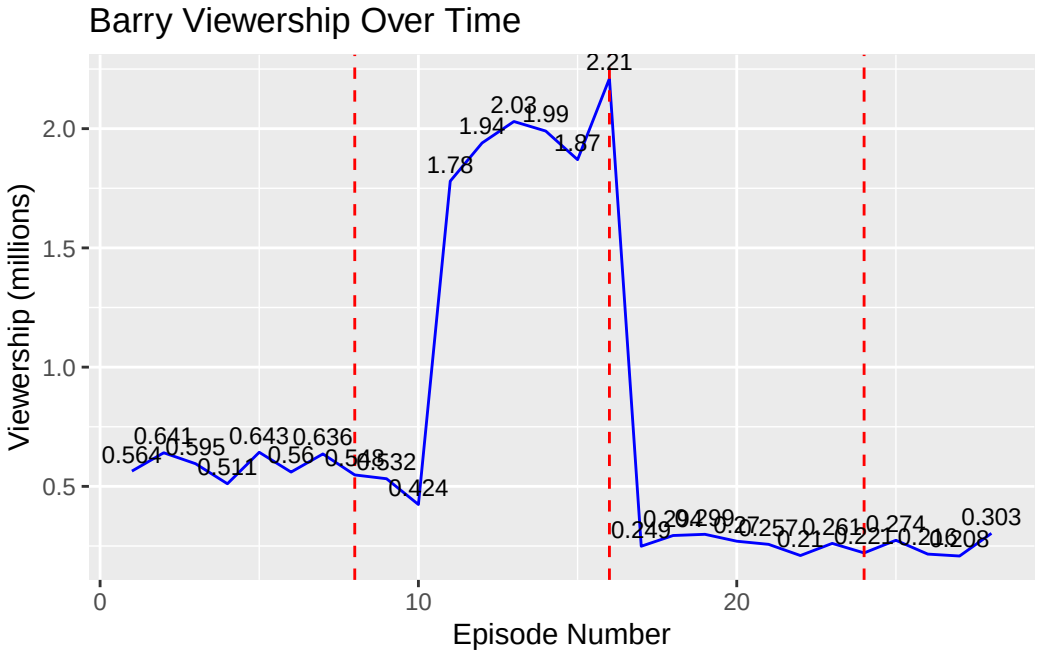
```r
barry_data <- barry_data %>%
  mutate(viewership_change = viewers - lag(viewers))
```

```r
library(ggplot2)

# Create a separate dataframe for the text labels
text_data <- data.frame(x = c(8, 16, 24), y = rep(max(barry_data$viewership_change), 3), l


ggplot(barry_data, aes(x = episode, y = viewers)) +
  geom_line(color = "blue") +
```

```
  geom_vline(xintercept = c(8, 16, 24), linetype = "dashed", color = "red") +
  geom_text(aes(label = viewers), vjust = -0.5, size = 3) +
  labs(x = "Episode Number", y = "Viewership (millions)", title = "Barry Viewership Over T
```



Tab 5: Summary

```
summary_stats <- data.frame(
  mean_viewership = mean(barry_data$viewers, na.rm = TRUE),
  max_viewership = max(barry_data$viewers, na.rm = TRUE),
  min_viewership = min(barry_data$viewers, na.rm = TRUE),
  total_episodes = nrow(barry_data)
)
```

5. Write a short description of the observed changes with inline references to numbers:

```
The average viewership for "Barry" is 0.7334286 million viewers per episode. The highest v
```