````
---
title: "ASSIGNMENT 4"
author: "Stephen Smitshoek"
date: '2022-04-20'
output:
  pdf_document: default
  html_document: default
  word_document: default
bibliography: bibliography.bib
---

# Markdown Basics

## Favorite Foods
1. Pizza
1. Cous Cous
1. Nachos

## Images
![All Cases (Log Plot)](C:/Users/sksmi/PeytoAccess/Personal/Bellevue/DSC520/
dsc520/completed/assignment04/plots/10-all-cases-log.png){height=50%}

## Add a Quote
> Tis but a flesh wound

## Add an Equation
$$
PV=nRT
$$

## Add a Footnote

^[This is a footnote]

## Add Citations

* Lander, Jared (2021). _R for Everyone_. Addison-Wesley.
* Field, Andy (2012). _Discovering Statistics Using R_. SAGE Publications
Inc.

# Inline Code
```{r include=FALSE}
setwd('C:/Users/sksmi/PeytoAccess/Personal/Bellevue/DSC520/dsc520')
library(ggplot2)
covid_df <- read.csv("data/nytimes/covid-19-data/us-states.csv")
covid_df$date <- as.Date(covid_df$date)
california_df <- covid_df[ which( covid_df$state == "California"), ]
ny_df <- covid_df[ which( covid_df$state == "New York"), ]
florida_df <- covid_df[ which( covid_df$state == "Florida"), ]
```

## NY Times COVID-19 Data
```{r echo=FALSE}
ggplot(data=florida_df, aes(x=date, group=1)) +
  geom_line(aes(y = cases, colour = "Florida")) +
````
````

```
  geom_line(data=ny_df, aes(y = cases,colour="New York")) +
  geom_line(data=california_df, aes(y = cases, colour="California")) +
  scale_colour_manual("",
                      breaks = c("Florida", "New York", "California"),
                      values = c('darkred', 'darkgreen', 'steelblue')) +
  xlab(" ") + ylab("Cases") + scale_y_log10()
```

R4DS Height vs Earnings
```{r echo=FALSE}
setwd('C:/Users/sksmi/PeytoAccess/Personal/Bellevue/DSC520/dsc520')
library(ggplot2)
heights_df <- read.csv("data\\r4ds\\heights.csv")
ggplot(heights_df, aes(x=height, y=earn, col=sex)) + geom_point() +
ggtitle("Height vs. Earnings") + xlab("Height (Inches)") + ylab("Earnings
(Dollars)")
```

Tables

Knitr Table with Kable
```{r echo=FALSE}
name <- c("Aragon", "Bilbo", "Frodo", "Galadriel", "Sam", "Gandalf",
"Legolas", "Sauron", "Gollum")
race <- c("Men", "Hobbit", "Hobbit", "Elf", "Hobbit", "Maia", "Elf", "Maia",
"Hobbit")
in_fellowship <- c(TRUE, FALSE, TRUE, FALSE, TRUE, TRUE, TRUE, FALSE, FALSE)
ring_bearer <- c(FALSE, TRUE, TRUE, FALSE, TRUE, TRUE, FALSE, TRUE, TRUE)
age <- c(88, 129, 51, 7000, 36, 2019, 2931, 7052, 589)

characters_df <- data.frame(name, race, in_fellowship, ring_bearer, age)


knitr::kable(characters_df, caption = 'One Ring to Rule Them All')
```
Pandoc Table
```{r echo=FALSE}
library(pander)
pandoc.table(characters_df, style='grid')
```

References