Homework #1

Group 4

5/10/2020

First, let's import the required libraries

```
library(ggplot2)
library(ggpubr)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(RColorBrewer)
```

Problem 1

(a) Plot area vs.temp, area vs. month, area vs. DC, area vs. RH for January through December combined in one graph. Hint: Place area on Y axis and use 2x2 matrix to place the plots adjacent to each other.

```
forestfires <- data.frame(read.csv("./data/forestfires.csv"), stringsAsFactors = FALSE)

forestfires$month <- factor(forestfires$month,
                            levels = c("jan", "feb", "mar",
                                       "apr", "may", "jun",
                                       "jul", "aug", "sep",
                                       "oct", "nov", "dec"))
p1 <- ggplot(forestfires, aes(temp, area)) + geom_point(color="#d63447") +
      ggtitle("Temp vs Area")
p2 <- ggplot(forestfires, aes(month, area, color=month)) + geom_point() +
      scale_color_brewer(palette = "Set2") +
      theme(legend.position = "none") +
      ggtitle("Month vs Area")
p3 <- ggplot(forestfires, aes(DC, area)) + geom_point(color="#d63447") +
      ggtitle("DC vs Area")
p4 <- ggplot(forestfires, aes(RH, area)) + geom_point(color="#d63447") +
      ggtitle("RH vs Area")

fig <- ggarrange(p1, p2, p3, p4,
```

```
                  ncol=2, nrow=2)
```

```
## Warning in RColorBrewer::brewer.pal(n, pal): n too large, allowed maximum for palette Set2 is 8
## Returning the palette you asked for with that many colors
```

```
## Warning: Removed 197 rows containing missing values (geom_point).
```

```
fig
```