

# Homework 2

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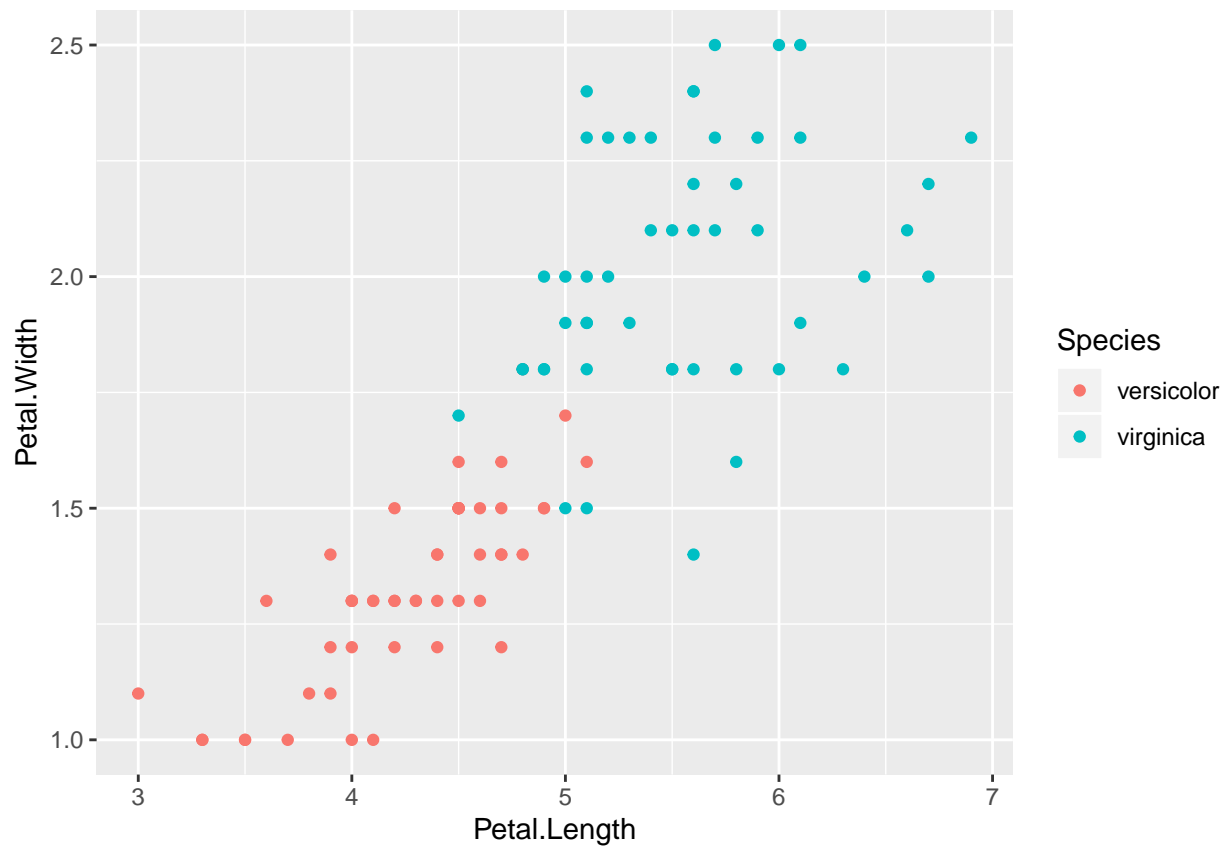
*# 1.) The species with the maximum value for Sepal.Length + Sepal.Width is virginica*

```
d <- iris %>%  
  mutate(Sepal.Sum = Sepal.Length + Sepal.Width) %>%  
  select(Sepal.Sum, Species) %>%  
  arrange(desc(Sepal.Sum))  
  head(d)
```

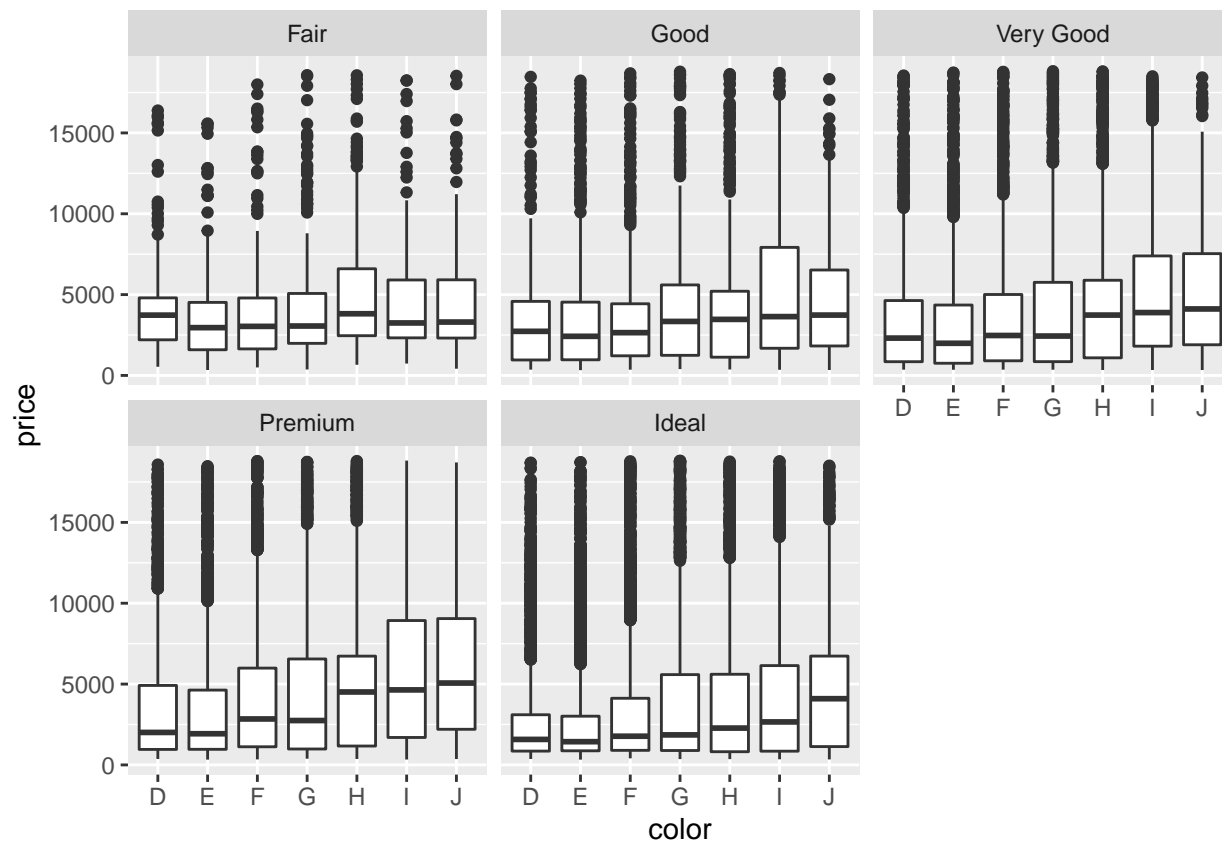
```
##   Sepal.Sum   Species  
## 1    11.7 virginica  
## 2    11.5 virginica  
## 3    10.8 virginica  
## 4    10.7 virginica  
## 5    10.6 virginica  
## 6    10.5 virginica
```

*# 2.)*

```
g <- iris %>%  
  filter(Species != "setosa") %>%  
  ggplot(aes(Petal.Length, Petal.Width, color = Species)) + geom_point()  
  print(g)
```



```
# 3.)
df <- diamonds %>%
  ggplot(aes(x = color, y = price)) + geom_boxplot() + facet_wrap(~cut)
print(df)
```



```
# 4.)
qnorm(0.95)
```

```
## [1] 1.644854
```

```
# 5.)
ht <-read.table(file = "heights.txt", header = T, sep = " ") %>%
  select(Dheight)
t.test(ht)
```

```
##
## One Sample t-test
##
## data: ht
## t = 909.19, df = 1374, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 0
## 95 percent confidence interval:
## 63.6135 63.8886
## sample estimates:
## mean of x
## 63.75105
```