Homework5

Baxter Worthing 9/26/2018

question 1

```
150 observations 5 variables
```

question 2

```
iris.1 <- filter(iris, Species == "virginica" | Species == "versicolor", Sepal.Length > 2.5)
100 observations
5 variables
```

question3

```
iris.2 <- select(iris.1, Species, Sepal.Length, Sepal.Width)
100 observations
3 variables</pre>
```

question4

```
iris.3 <- arrange(iris.2, desc(Sepal.Length))</pre>
head(iris.3)
Species Sepal.Length Sepal.Width
1 virginica
                     7.9
                                 3.8
2 virginica
                     7.7
                                 3.8
3 virginica
                     7.7
                                 2.6
4 virginica
                                 2.8
                     7.7
5 virginica
                     7.7
                                 3.0
6 virginica
                                 3.0
                     7.6
```

question5

```
iris.4 <- mutate(iris.3, Sepal.area = Sepal.Length*Sepal.Width)
100 obervations
4 variables</pre>
```

question6

```
iris.5 <- summarize(iris.4, meanLength = mean(Sepal.Length), meanWidth = mean(Sepal.Width), smapleSize</pre>
```

```
print(iris.5)
  meanLength meanWidth smapleSize
1  6.262  2.872  100
```

question7

```
iris.4 <- group_by(iris.4, Species)</pre>
iris.6 <- summarize(iris.4, meanLength = mean(Sepal.Length), meanWidth = mean(Sepal.Width), smapleSize
print(iris.6)
# A tibble: 2 x 4
 Species
             meanLength meanWidth smapleSize
  <fct>
                  <dbl>
                             <dbl>
                                         <int>
                              2.77
1 versicolor
                    5.94
                                            50
2 virginica
                    6.59
                              2.97
                                            50
```

question8

"' iris %>% + filter(iris, Species == "virginica" | Species == "versicolor", Sepal.Length > 2.5) %>% + select(iris.1, Species, Sepal.Length, Sepal.Width) %>% + arrange(iris.2, desc(Sepal.Length)) %>% + arrange(iris.2, desc(Sepal.Length)) %>% + group_by(iris.4, Species) %>% + summarize(iris.4, meanLength = mean(Sepal.Length), meanWidth = mean(Sepal.Width), smapleSize = n()) %>% + summarize(iris.4, meanLength = mean(Sepal.Length), meanWidth = mean(Sepal.Width), smapleSize = n()) -> iris6