Activity 10

Mallory LaRusso

4/2/2019

Step 1. Create an R Markdown file and choose the output type to be pdf. The instruction for each step should be included as separate headers in this file.

Step 2. Add the title, author, and date to the file.

Step 3. Load the dplyr package and ggplot2 package. Do not show any messages when loading those packages. Show the first 10 rows in the diamonds data set. In the pdf, display both the R code and the output.

```
diamonds[1:10,]
```

```
## # A tibble: 10 x 10
##    carat cut       color clarity depth table price     x     y     z
##    <dbl> <ord>     <ord> <ord>   <dbl> <dbl> <int> <dbl> <dbl> <dbl>
##  1 0.23  Ideal     E     SI2      61.5    55   326  3.95  3.98  2.43
##  2 0.21  Premium   E     SI1      59.8    61   326  3.89  3.84  2.31
##  3 0.23  Good      E     VS1      56.9    65   327  4.05  4.07  2.31
##  4 0.290 Premium   I     VS2      62.4    58   334  4.2   4.23  2.63
##  5 0.31  Good      J     SI2      63.3    58   335  4.34  4.35  2.75
##  6 0.24  Very Good J     VVS2     62.8    57   336  3.94  3.96  2.48
##  7 0.24  Very Good I     VVS1     62.3    57   336  3.95  3.98  2.47
##  8 0.26  Very Good H     SI1      61.9    55   337  4.07  4.11  2.53
##  9 0.22  Fair      E     VS2      65.1    61   337  3.87  3.78  2.49
## 10 0.23  Very Good H     VS1      59.4    61   338  4     4.05  2.39
```

Step 4. Use inline R code to answer the number of rows and columns in the diamonds data set. Do not hard-code the values.

There are 53940 rows and 10 columns.

Step 5. Reproduce the following output.

```
## # A tibble: 4 x 4
## # Groups:   color [2]
##   color cut   mean_price mean_carat
##   <ord> <ord>      <dbl>      <dbl>
## 1 D     Fair       4291.      0.920
## 2 D     Ideal      2629.      0.566
## 3 J     Fair       4976.      1.34
## 4 J     Ideal      4918.      1.06
```

Step 6. Reproduce the following output. Set the height of the figure to be 3.