Module 2 – lesson 06: Exercise Overview

For your graded assignment, you'll need to create an R Markdown file with each of the following 8 elements and then answer questions about the resulting document.

Create an R Markdown file with the following 8 elements:

1. Title “The Air Quality Dataset”

2. Author: “your name”

3. A level 2 header “Summary of Air Quality Dataset” followed by

4. this paragraph. In this paragraph provide the syntax to:

* show “air quality” in non-proportional font using backticks;
* create a non-numbered bulleted list for the 6 variables in the dataset
* put each variable name in bold using double asterisks
* put everything in parentheses in italics by placing a single underscore immediately before and after the opening and closing parentheses
* notice that the 1st sentence contains an inline footnote which should appear at the bottom of your document when compiled

This exercise will be working with the built-in air quality dataset.

^[ Chambers, J. M., Cleveland, W. S., Kleiner, B. and Tukey, P. A. (1983) Graphical Methods for Data Analysis. Belmont, CA: Wadsworth.]

This dataset contains 154 daily air quality measurements in New York from May 1, 1973 (a Tuesday) to September 30, 1973. The dataset contains 6 variables:

Ozone: Mean ozone in parts per billion (ppb) from 1300 to 1500 hours at Roosevelt Island;

Solar.R: Solar radiation in Langleys (lang) in the frequency band 4000–7700 Angstroms from 0800 to 1200 hours at Central Park;

Wind: Average wind speed in miles per hour (mph) at 0700 and 1000 hours at LaGuardia Airport;

Temp: Maximum daily temperature in degrees Fahrenheit (oF) at La Guardia Airport;

Month: numeric month (1-12)

Day: numeric Day of the month (1-31)

5. a second level 3 header “Table of Top of the Air Quality Dataset” followed by

6. a table of the head of the airquality dataset – insert an R code chunk with the following code

```{r}

knitr::kable(head(airquality))

```

7. a third level 3 header “Plot of Ozone by Temperature – Air Quality Dataset” followed by

8. a plot of the temperature and ozone from the built-in airquality dataset – insert an R code chunk with the following code

```{r}

plot(airquality$Temp, airquality$Ozone,

main="Airquality: Ozone by Temperature")

```

KNIT the document to HTML and KNIT to WORD