**Task 1 (downloading materials)**

* Download RMarkdown Workshop Folder (as zipped file)
  + Go to <https://github.com/QFCatMSU/RMarkdown-Workshop-Material>
  + Click on green ***Clone or download*** button and choose ***Download ZIP***
* Extract (unzip) ***RMarkdown-Workshop-Material-master*** folder
* Open ***RMarkdown-Workshop-Material.rProj*** file (root directory) in RStudio
  + double-clicking the file should work…
* Execute the ***01-WindsAndTemps.R*** script
  + In ***Files*** Tab, go to ***scripts*** folder
  + Click on ***01-WindsAndTemps.R***
  + Click ***Source***
* Challenge: Execute ***Rmd*** files (in root folder) using ***Knit*** button
* Challenge: Send ***Rmd*** files to HTML, PDF, and Word using the ***Knit*** dropdown options

**Task 2 (using 4th example – Breaking up code)**

* Save example 4 under a new name
* Remove all text outside of the code blocks and the header.
* Show only Plots 1 and 3 in the document (hide Plot 2)
* Show the code for, but do not execute, the summary statistics
* Execute, but do not show the code for, the number of days in each wind direction
* Add your own text before:
  + before the summary stat code,
  + before plot 1
  + at the end of the document

Challenge: Present summary stats and add a histogram for ***avgTemp***

Challenge: add Plot 2 at the end of the document (using the plot2 variable)

**When I ask for text in Tasks 2 and 3, feel free to use the** [**Lorem Ipsum Generator**](https://loremipsum.io/generator/)**.**

**Task 3 (using 7th example – RMD basics)**

* Save example 7 under a new name
  + note: if you get an error on Knit then you might need to delete lines 61 and 62 – this issue has to do with different installations of TeX and I have not tracked it down yet but these lines are not vital
* Add Header level four content to the document
  + So, it should have levels 2, 3, and 4
* Create a 3x4 table that includes bolded and italics content
* Create an ordered list that includes your favorite foods, animals, and movies
* Challenge: print ***\*\\\* $^&*** to document
* Challenge: print **Vcyl = πr2h** to document
  + Note: You can use Latex to create Greek characters like **$\alpha$** or **$\beta$**...

**Task 4 (using 9th example – Inline codes)**

* Save example 9 under a new name
* Write a paragraph that include information about the mean, median, minimum, and maximum temperatures from the ***avgTemp*** vector
* Include the dates for the minimum and maximum temperatures
* Challenge: put the Celsius temperature next to the Fahrenheit
  + C = 5/9 (F – 32)
* Challenge: create a table that list the minimum and maximum temperatures, the dates they occur, the humidity on that date, the wind speed, and wind direction of that date.
  + date: weatherData$date
  + humidity: weatherData$relHum
  + wind speed: weatherData$windSpeed
  + wind direction: weatherData$windDir