

# Lab 5

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## 1 Question 1 from task 3

I chose this data because it includes aviation data pertaining to safety, which is one of my top choices for the research project I will be working on this semester. Since I currently serve part-time in the Air Force Reserves on aircraft I have a deep interest in learning more about what causes failures in modern aircraft. Furthermore, I liked that this source was a more difficult source to scrape from compared to an API or other listing since the data and facts were more scattered throughout the article. I could see myself using this data since it talks about how safe 2017 is for flights compared to previous years and adds context to better tell a sufficient story. It specifically outlines safety in the past 3 years or so, so I will need to gather data from even later years to create a better statistical model if this is the topic I pursue. For help in scraping this data I referred to both stack overflow and data camp articles. Both were a huge help and provided additional examples that helped me craft my own code.

## 2 Question 2 from task 4

I decided to select a different type of data for this question since I have not selected my research topic yet. For this data I gathered the natural gas prices from 1984 to 2015 indexed from Henry Hub. It was interesting to see how high gas prices were before the shale revolution in 2010-2011. Before that natural gas was not nearly as economical as coal and now I can see why it is displacing coal so fast.. the prices are a fraction of what they were and are almost exactly the same cost per unit of measure as coal. I like this data because I can compare it to tons of other pieces of data in order to uncover unique insights into why prices have developed in the way that they have and perhaps find a way to predict how they will move in the future. Again, for this data I referred mostly to data camp articles in order to see examples of how others used Quandl to pull data into R. I used packages from the httr and jsonlite library to help me pull the data and manipulate it.