There are 2 options to complete the HW this week. You will either use the Census API (option 1) or the Twitter API (option2). I find that the Census API can be finicky and thus I have provided another option that may be less troublesome.

## OPTION 1:

1. Download data for all of the census tracts in Fulton County, GA on education levels.

Before beginning this assignment, it is imperative that you watch the async lectures and review the 07-webscraping-new.rmd file.

You will also find pertinent info here: <a href="https://www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html">https://www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html</a>

```
Hint: lookup_code("CA","Los Angeles")
```

```
Hint: acs.fetch( ... )
```

2. Compute the proportion of the population that has a bachelor's degree or above by census tract.

```
Hint: acs.colnames(county_educ)
```

```
Hint: divide.acs (...)
```

3. Download data for all of the zip codes in LA county on family income by census tract.

```
See Lines 260 – 270 for an example.
```

4. Compute the proportion of the population that has family income above 75,000 in each census tract

```
Hint: county_income<-acs.fetch(geography=select_zip,
endyear = 2016,
table.number="B19001",
col.names="pretty")
```

acs.colnames(county\_income)

5. Plot the proportion of residents in each census tract with incomes above 75,000 as a function of COLLEGE EDUCATION.

Note the typo in #5 in the original ....

1. Create a twittR Account. What is your consumerKey? What is your accessToken?

You will need to create an "app" with twitter.

Read more about it here: <a href="https://developer.twitter.com/en/account/get-started">https://developer.twitter.com/en/account/get-started</a> Creating an app here: <a href="https://developer.twitter.com/en/apps">https://developer.twitter.com/en/apps</a>

Follow instructions and take note off your API keys and tokens which grant you access.

\*\*\* If needed, create a developer account:

Apply for a developer account at <a href="https://developer.twitter.com/en/apply-for-access">https://developer.twitter.com/en/apply-for-access</a> .

2. Run example 07-twitterAPI.rmd. Use hashtag: Trump. What are the 5 most common words contained within collected tweets?

Run the following line of code and change the hashtag, n, and date, to what you desire.

Search<-twitteR::searchTwitter("#Trump",n=10,since="2019-09-09")

3. Run this RMD file and choose your favorite hashtag, e.g. chocolate. Create a wordcloud using words from all collected tweets.