

Lab 9: APIs

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Lab report

Exercises

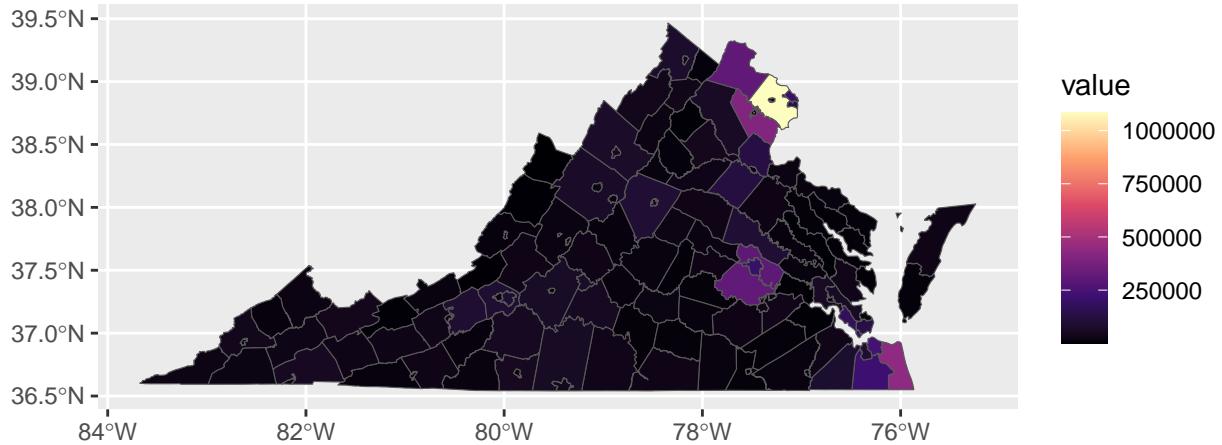
Exercise 1

```
## Getting data from the 2010 decennial Census

## Warning: * You have not set a Census API key. Users without a key are limited to 500
## queries per day and may experience performance limitations.
## i For best results, get a Census API key at
## http://api.census.gov/data/key_signup.html and then supply the key to the
## `census_api_key()` function to use it throughout your tidy census session.
## This warning is displayed once per session.

## Census API call: https://api.census.gov/data/2010/dec/sf1?get=P001001%2CNAME&for=county%3A%
```

Using Census Summary File 1



Exercise 2

Exercise 3

```
## Getting data from the 2010 decennial Census  
## Using Census Summary File 1
```

```
library(tidyr)  
  
va_tracts_wide <- va_tracts_2010 %>%  
  pivot_wider(  
    names_from = variable,  
    values_from = value  
  )
```

Exercise 4

```
library(dplyr)

va_tracts_final <- va_tracts_wide %>%
  mutate(
    pct_nonwhite = ((P001001 - P003002) / P001001) * 100,
    pct_owned = ((H004002 + H004003) / H001001) * 100
  )
```

Exercise 5

Exercise 6

Exercise 7