Lab 1. Intro to RMarkdown & Github

GIS 3 - Geocomputation - Spring 2020 - Lily Cao

Contents

Show the R version you have installed

```
version
```

```
##                _
## platform       x86_64-pc-linux-gnu
## arch           x86_64
## os             linux-gnu
## system         x86_64, linux-gnu
## status
## major          3
## minor          5.3
## year           2019
## month          03
## day            11
## svn rev        76217
## language       R
## version.string R version 3.5.3 (2019-03-11)
## nickname       Great Truth
```

Load libraries of your choice

```
library(tidyverse)
```

```
## -- Attaching packages ----------------------------------------------------------------- tidyverse 1.3.0
```

```
## v ggplot2 3.3.0     v purrr   0.3.3
## v tibble  3.0.0     v dplyr   0.8.5
## v tidyr   1.0.2     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.5.0
```

```
## -- Conflicts ------------------------------------------------------------------ tidyverse_conflicts()
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(sf)
```

```
## Linking to GEOS 3.5.1, GDAL 2.2.2, PROJ 4.9.2
```

```
library(raster)
```

```
## Loading required package: sp
```

```
##
## Attaching package: 'raster'
```

```
## The following object is masked from 'package:dplyr':
##
##     select
```

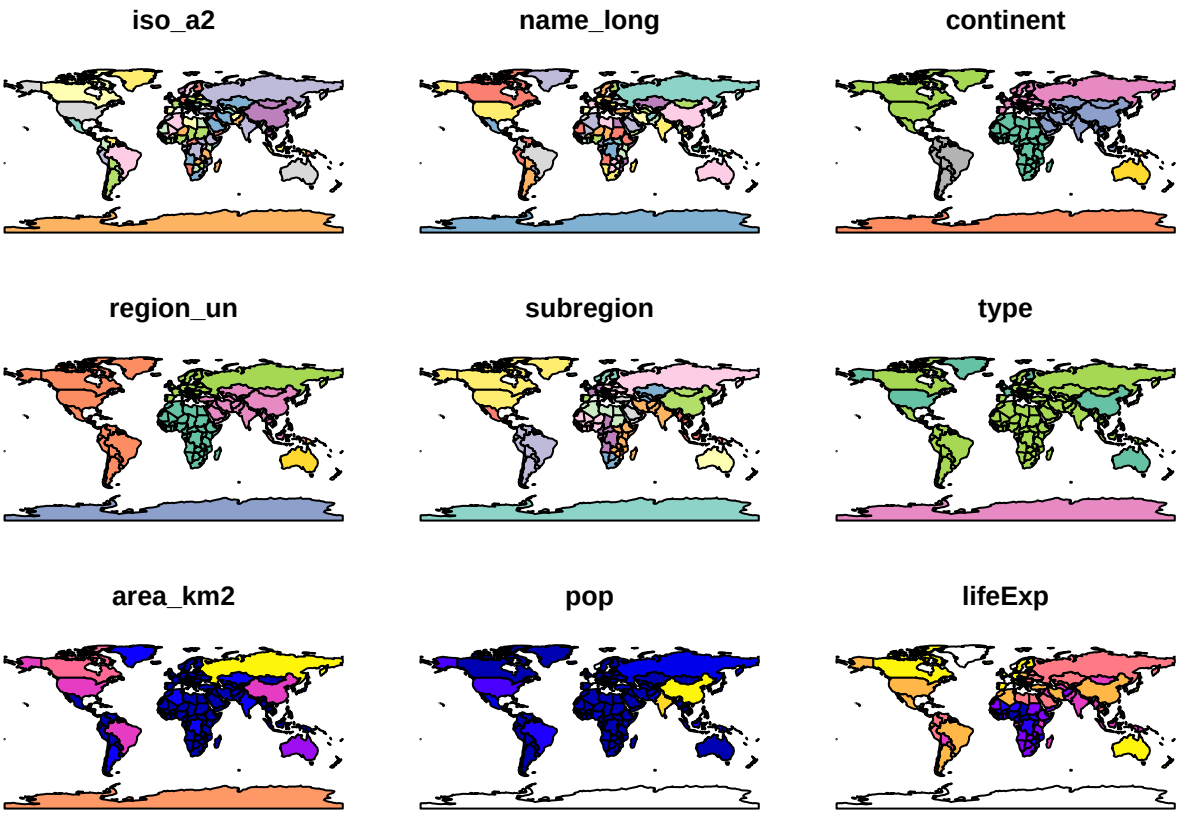
```
## The following object is masked from 'package:tidyr':
##
##     extract
```

```
library(spData)
library(spDataLarge)
library(sp)
```

Include 2-3 code examples of R that you've learned as code chunks.

```
plot(world)
```

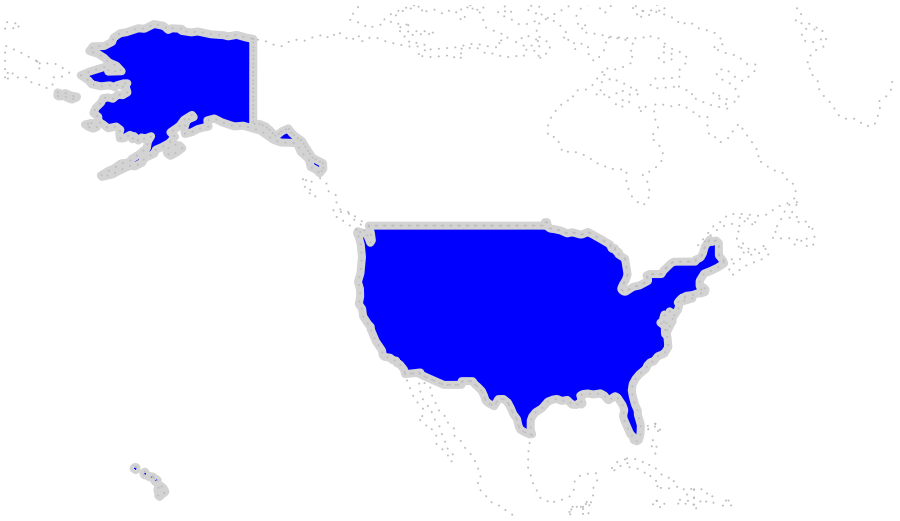
```
## Warning: plotting the first 9 out of 10 attributes; use max.plot = 10 to plot
## all
```




```
world[world$name_long == "United States", ]
```

```
## Simple feature collection with 1 feature and 10 fields
## geometry type:  MULTIPOLYGON
## dimension:      XY
## bbox:           xmin: -171.7911 ymin: 18.91619 xmax: -66.96466 ymax: 71.35776
## CRS:            EPSG:4326
## # A tibble: 1 x 11
##   iso_a2 name_long continent region_un subregion type  area_km2    pop lifeExp
##   <chr>  <chr>     <chr>     <chr>     <chr>     <chr>    <dbl>  <dbl>   <dbl>
## 1 US     United S~ North Am~ Americas  Northern~ Coun~ 9510744. 3.19e8    78.8
## # ... with 2 more variables: gdpPercap <dbl>, geom <MULTIPOLYGON [°]>
```

```
us <- world[world$name_long == "United States", ]
plot(st_geometry(us), expandBB = c(0,0,0,0), col = "blue", lwd = 4, border = "lightgrey")
plot(st_geometry(world), lty = 3, add = TRUE, border = "grey")
```



Is rendered using the output of your choice

HTML