

# GIS III: Lab 1

Rachel Steiner-Dillon

4/10/2020

## Basics of R

My version of R is 3.6.3

```
version
```

```
##  
## platform      x86_64-w64-mingw32  
## arch          x86_64  
## os            mingw32  
## system        x86_64, mingw32  
## status  
## major         3  
## minor         6.3  
## year          2020  
## month         02  
## day           29  
## svn rev       77875  
## language      R  
## version.string R version 3.6.3 (2020-02-29)  
## nickname      Holding the Windsock
```

Commenting:

```
#This is a comment made by Rachel
```

Installing and loading packages:

```
#Note: I have run this chunk quietly to avoid printing warnings in my final PDF.
```

```
#install.packages(" ")
```

```
library(sf)  
library(spData)  
library(spDataLarge)
```

## Example Code

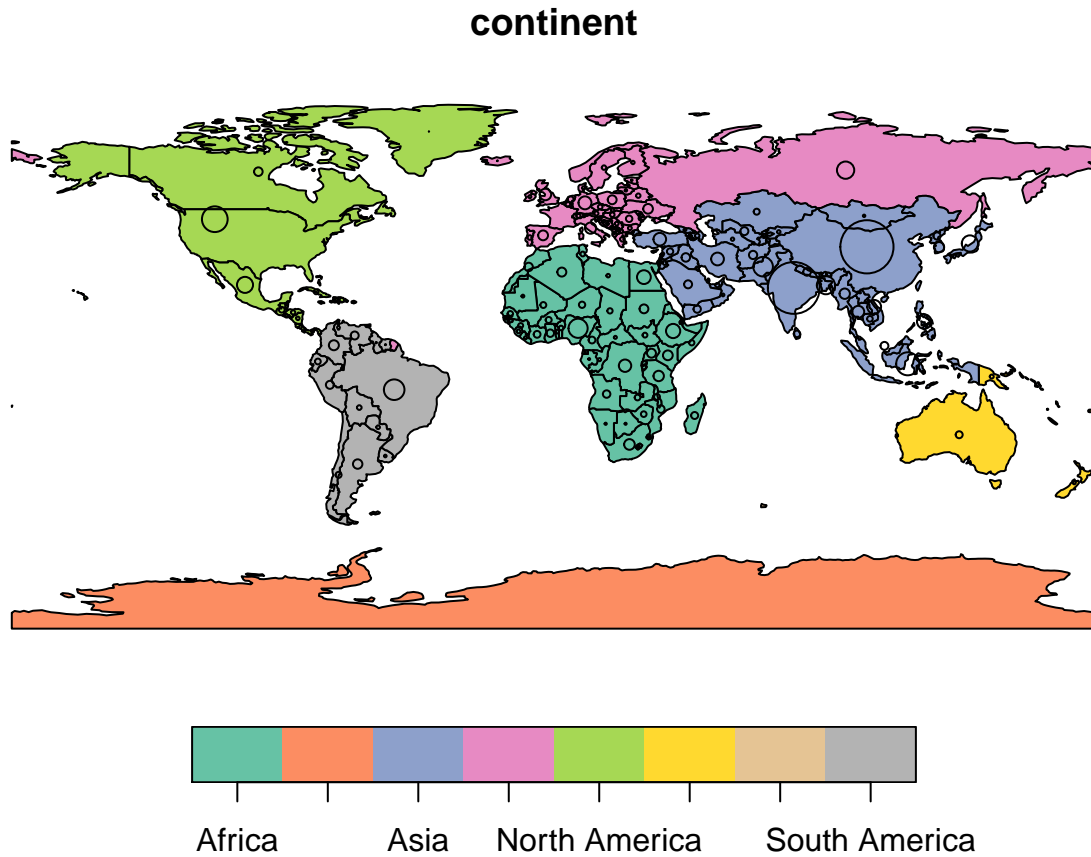
Change Working Directory:

```
#setwd('C:/Users/rache/Documents/GitHub/GIS_3')  
getwd()
```

```
## [1] "C:/Users/rache/Documents/GitHub/GIS_3"
```

World Population:

```
plot(world['continent'], reset=FALSE)
cex=sqrt(world$pop)/10000
world_cents = st_centroid(world, of_largest=TRUE)
plot(st_geometry(world_cents), add=TRUE, cex=cex)
```



Nigeria in Context:

```
nigeria = world[world$name_long == "Nigeria", ]
africa = world[world$continent == "Africa", ]
plot(st_geometry(nigeria),
     expandBB = c(0.5,1,1.2,0.8),
     col = "cadetblue2", lwd = 3,
     main = "Nigeria in Context",
     reset=TRUE)
plot(africa[0], add = TRUE)
text(8, 9.5, labels="Nigeria")
```

## Nigeria in Context

