HW1 R Basics

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```
setwd("~/Documents/CofC Classwork/Spring 2018/Applied Quantitative Methods/Assignments")
tgpp <- read.csv(file="tgpp.csv", header=TRUE)

#1. What are the names of the columns in this dataset?
colnames(tgpp)
```

```
##  [1] "plot"      "year"      "record_id" "corner"    "scale"
##  [6] "richness"  "easting"   "northing"  "slope"     "ph"
## [11] "yrsslb"
```

```
#2. How many rows and columns does this data file have?
ncol(tgpp)
```

```
## [1] 11
```

```
nrow(tgpp)
```

```
## [1] 4080
```

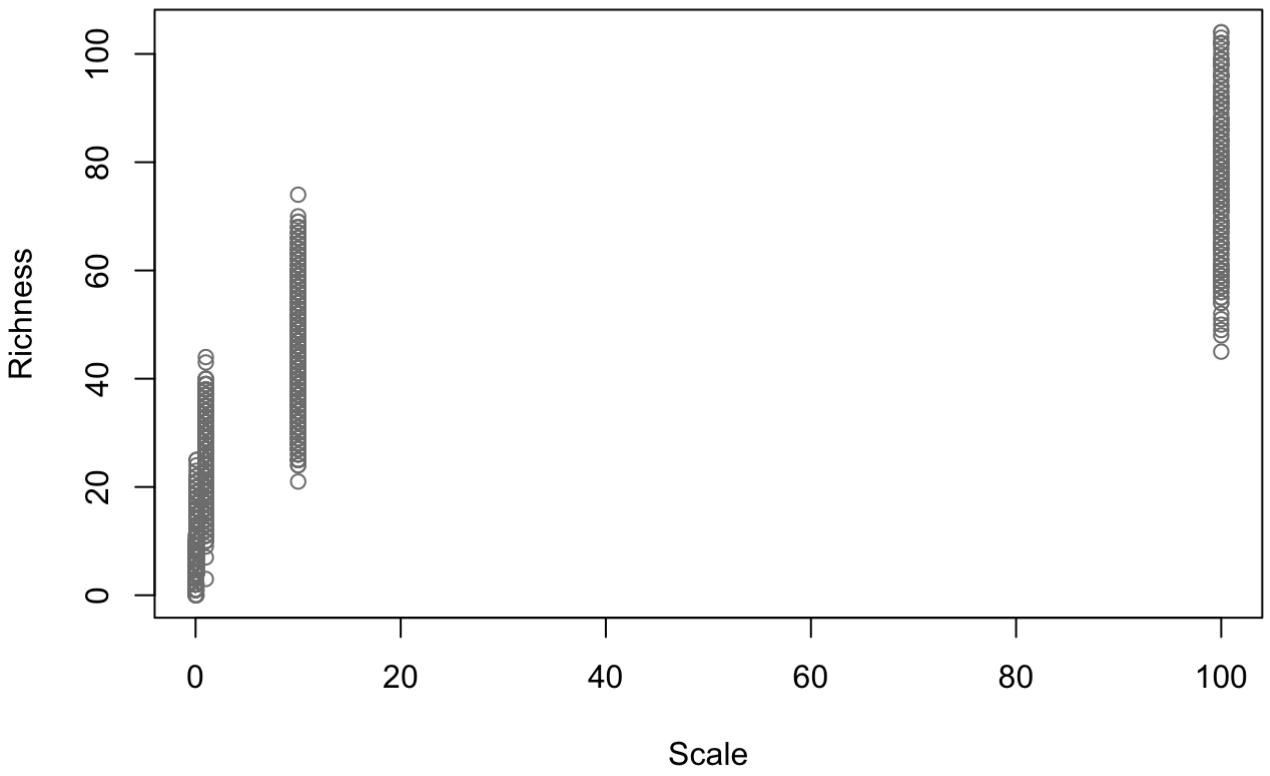
```
#3. What kind of object is each data column?
sapply(tgpp, class)
```

```
##      plot      year record_id    corner     scale  richness   easting
## "integer" "integer" "integer" "integer" "numeric" "integer" "integer"
##  northing     slope        ph    yrsslb
## "integer" "integer" "numeric" "numeric"
```

```
#4. What are the values of the the datafile for rows 1, 5, and 8 at columns 3, 7, and 1
0?
tgpp[c(1,5,8),c(3,7,10)]
```

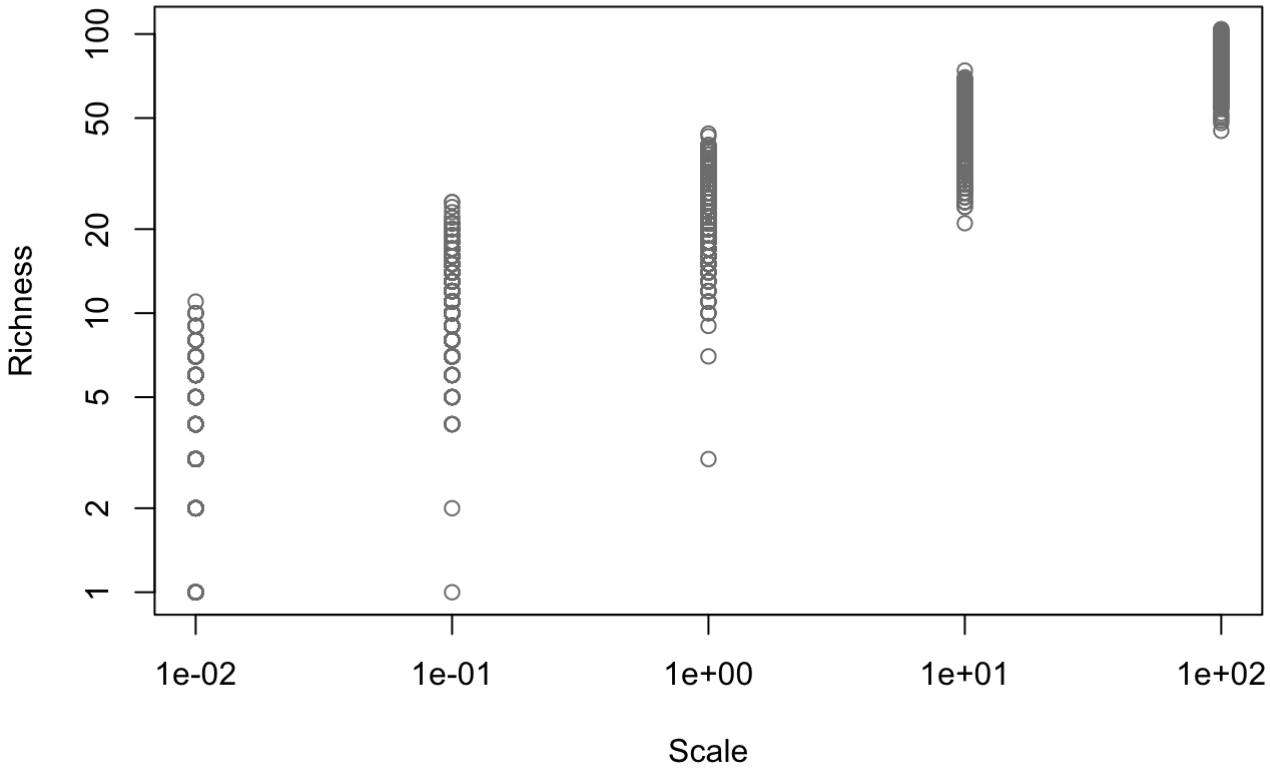
```
##   record_id easting  ph
## 1       187  727000 6.9
## 5       191  727000 6.9
## 8       194  727000 6.9
```

```
#5. Create a pdf of the relationship between the variables “scale” and “richness”.

plot(tgpp$scale, tgpp$richness, xlab="Scale", ylab="Richness", col="grey50")
```




```
#5.1 Setting the plot argument "log" equal to "xy"...

plot(tgpp$scale, tgpp$richness, xlab="Scale", ylab="Richness", col="grey50", log="xy")
```

```
## Warning in xy.coords(x, y, xlabel, ylabel, log): 4 y values <= 0 omitted
## from logarithmic plot
```


Richness
1
2
5
10
20
50
100
1e-02
1e-01
1e+00
1e+01
1e+02
Scale