R_basics_Assignment_Radchenko

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```
tgpp <- read.csv("~/R/R_basics/tgpp.csv") #Start of Lesson 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"
```

How many rows and columns does this data file have?

```
dim(tgpp)
```

```
## [1] 4080   11
```

4080 Rows and 11 columns

What kind of object is each data column? Hint: checkout the function sapply().

```
sapply(tgpp, class) #don't have to put anything in the function, just name them!
```

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

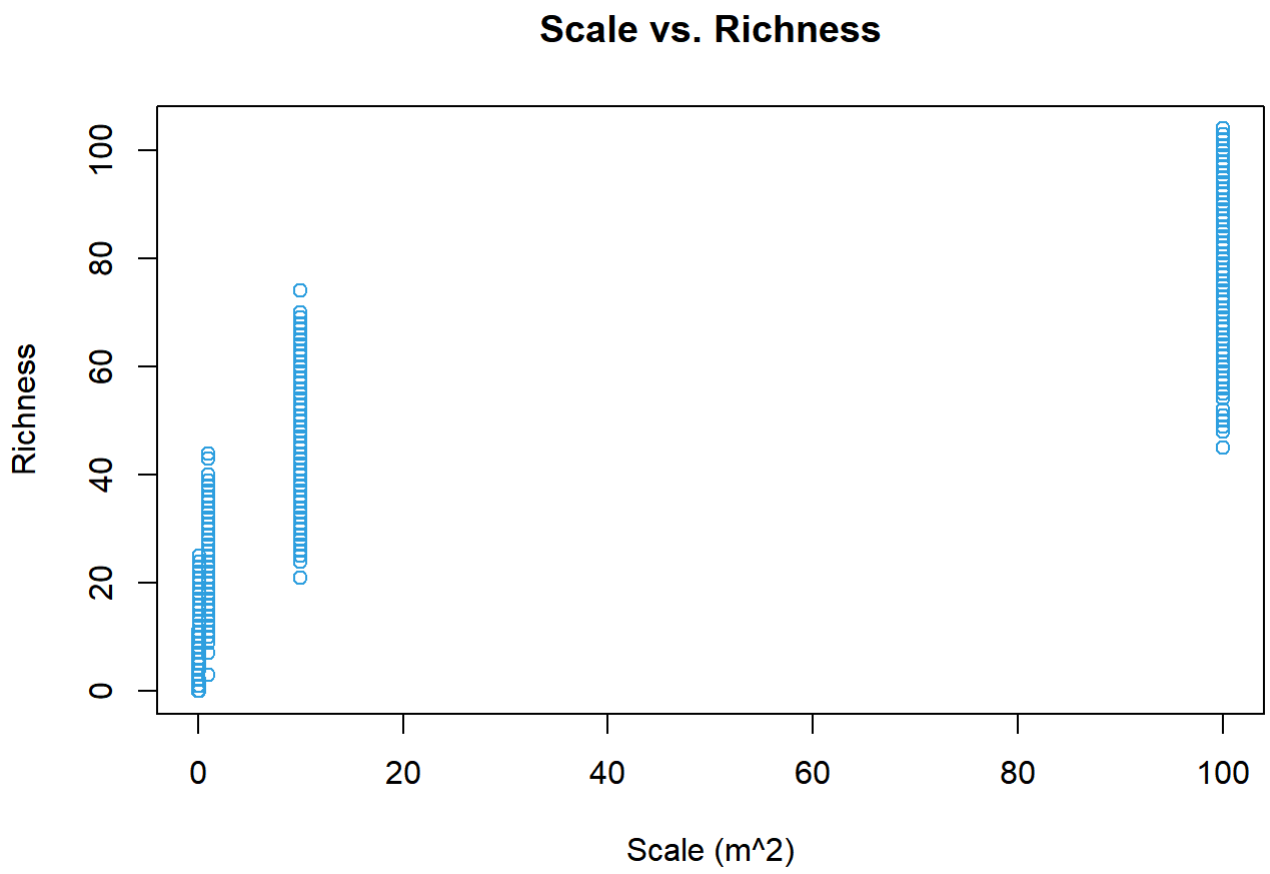
What are the values of the the datafile for rows 1, 5, and 8 at columns 3, 7, and 10

```
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
```

```
 #row then column
```

```
SR <- plot(richness~scale, data = tgpp, xlab = 'Scale (m^2)', ylab = 'Richness', main = 'Scale v
s. Richness', col = '#2E9FDF')
```



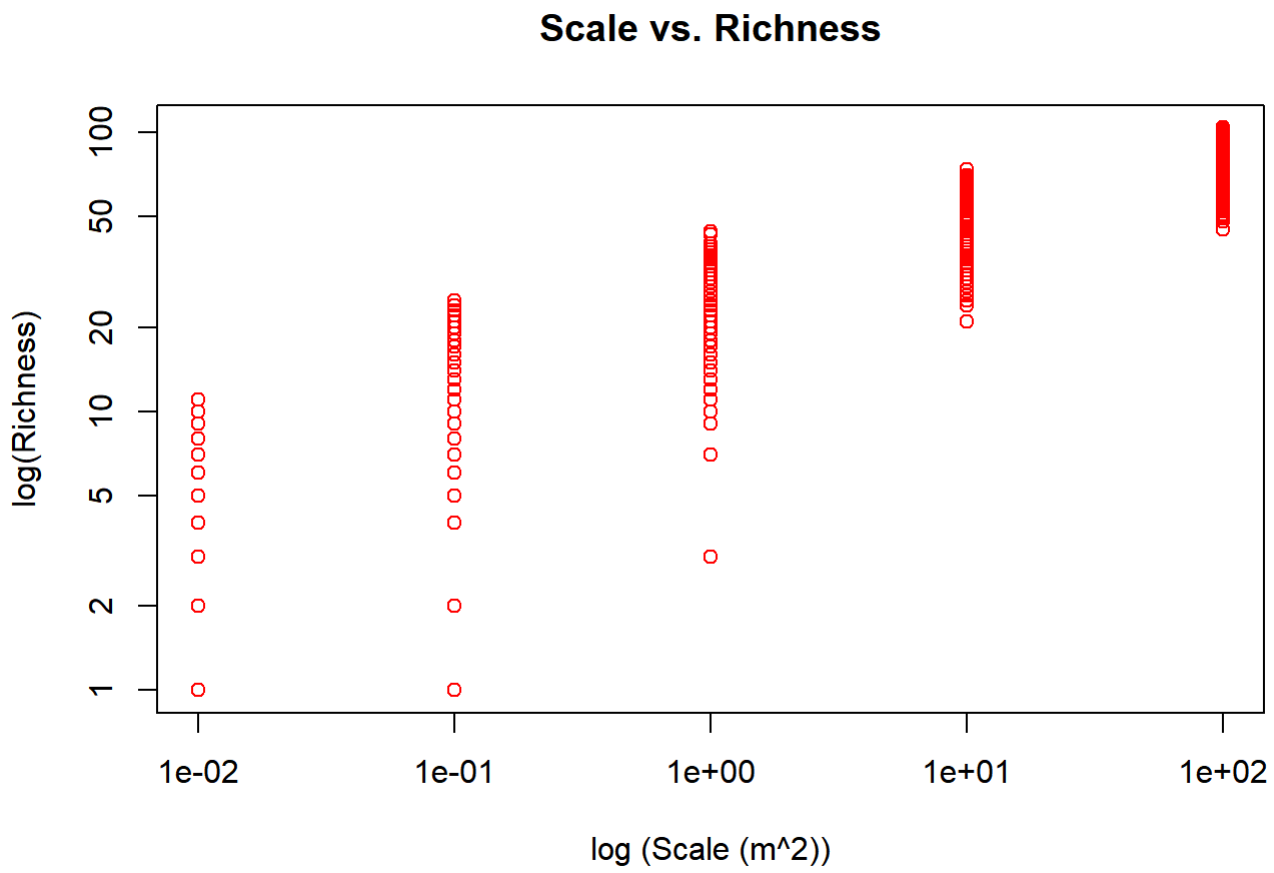

```
pdf('~/R/R_basics/Species_richness.fig1.pdf')
dev.off()
```

```
## png
##   2
```

What happens to your plot when you set the plot argument log equal to ‘xy’. plot(…, log=‘xy’)

```
plot(richness~scale, data = tgpp, xlab = 'log (Scale (m^2))', ylab = 'log(Richness)', main = 'Sc
ale vs. Richness', col = 2, log = 'xy')
```

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



#Changes both axis to the log scale