STAT 443: Lab 1

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Question 1

```
# read in data to an object called dat
dat <- read.csv("LakeLevels.csv")
head(dat, 10)
```

```
##         Date LakeLevel
## 1   1/1/2007   3732.65
## 2   1/2/2007   3732.65
## 3   1/3/2007   3732.65
## 4   1/4/2007   3732.64
## 5   1/5/2007   3732.64
## 6   1/6/2007   3732.64
## 7   1/7/2007   3732.64
## 8   1/8/2007   3732.64
## 9   1/9/2007   3732.64
## 10 1/10/2007   3732.64
```

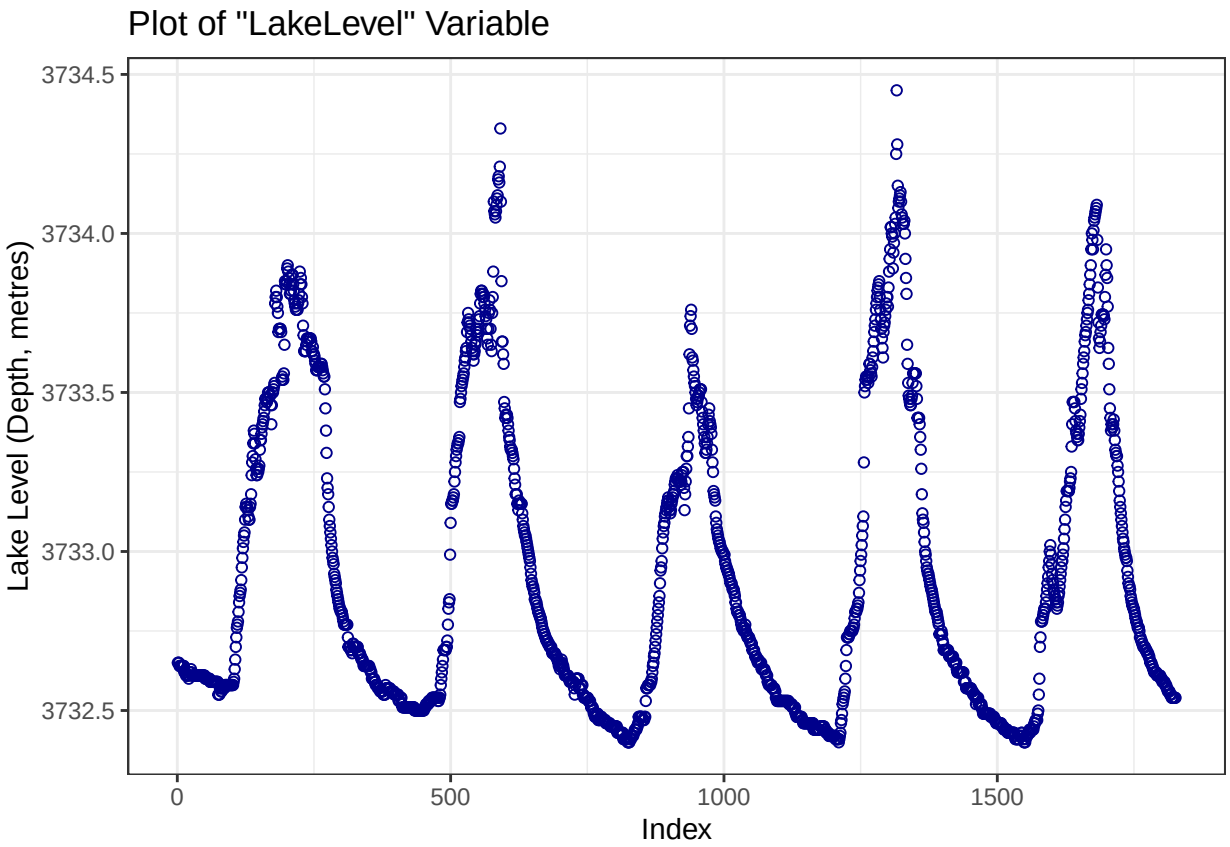
Then, we can check the `names` of this data frame.

```
names(dat)
```

```
## [1] "Date"      "LakeLevel"
```

Now, we create a plot of the `LakeLevel` variable.

```
ggplot(dat, aes(x = 1:nrow(dat), y = LakeLevel)) +
  geom_point(shape = 1, col = "darkblue") +
  xlab("Index") +
  ylab("Lake Level (Depth, metres)") +
  ggtitle("Plot of \"LakeLevel\" Variable") +
  theme_bw()
```



This plot is different from what we want for a time series because the value on the x-axis is the `Index` of the Lake Level data points in the `dat` dataframe rather than time. Hence, this is not a time series (yet!)

Question 2

```
# this is where your R code goes
```

Question 3

```
# this is where your R code goes
```

Question 4