

1. What kind of censoring is occurring in each of the following situations (left, right, or interval)?
 - (a) A water quality data set that has some values below the detection limit.
 Solution:
 This is an example of left censoring.
 - (b) A study of lightbulb life where we screw bulbs into sockets and then check whether they are on or off once a day
 Solution:
 This is an example of interval censoring (where our interval is 1 day).
 - (c) A drug study where we observe whether people are ill or healthy over a total of 3 years
 Solution:
 This is an example of right censoring, because we don't observe people past 3 years.
 - (d) Values between the detection limit and the quantitation limit in a water quality data set
 Solution:
 This could be considered interval censoring if we consider the values between the DL and QL as unknown.

2. In the lecture I gave you instructions for drawing a censored boxplot, and information on how to load the Cadmium data.
 - (a) Draw the boxplot that I showed in lecture.
 Solution

```
data(Cadmium)
with(Cadmium, cenboxplot(obs=Cd, cen=CdCen, main="Cadmium Boxplot", ylab="Concentration"))
```

 These commands should draw the boxplot.
 - (b) There is an argument in `cenboxplot()` called `border`. This changes the colour on the border of the boxplot. See if you can make the colour green, or purple.
 Solution

```
data(Cadmium)
with(Cadmium, cenboxplot(obs=Cd, cen=CdCen, main="Cadmium Boxplot", ylab="Concentration",
border="purple"))
```

 Note that the colour is placed inside quotation marks.

3. Free Time!! Actually, this is a good opportunity to try any unfinished exercises from previous segments. Alternately, you can ask questions that you might have about R or censor data that I have not yet covered in lecture.