Module 1 Problem Set

insert your name here

insert date here

In this problem set, you will practice "knitting," creating objects (i.e., atomic vectors and lists), and investigating those objects.

- Note: Change author to your name & date to current date above in the YAML header (we'll learn more about headers later on. . .)
- Save this Rmd file to your "HED696C_RClass/problemsets/module1" folder using the naming convention "lastname_module1_ps.Rmd"
- If you're experiencing errors while working on this assignment (or any assignment), start fresh by closing out R (when prompted to "save your workspace" hit "don't save") and re-open the assignment.

Step 1: Practice "knitting" the problem set Rmd file!

- Open your RStudio via the Rproject (`HED96C_RClass.Rproj`) we created in class
- Once in RStudio, in the top menu bar, click on File > Open File. . .
- Navigate to your HED696C_RClass folder and open your saved `module1_ps.Rmd` file (hint it should be located in: problemsets/module1 folder)
- Open the module1_ps.Rmd file in RStudio
- At the top of the module1_ps.Rmd file, insert your name and the date in the first few lines of this .Rmd file where indicated for you
- Now select the "Knit" tab (icon with blue yarn ball) or use the drop down menu next to the yard ball and select "Knit to PDF"

Step 2: Objects in R

Question 1: What are the two broad types of vectors in R? How are they different from one another?

- ANSWER: TYPE YOUR ANSWER HERE

Question 2: How are the two objects below similar and/or different?

- I have already created two objects in the R chunk below: `x1` and `x2`
- Run diagnostics of these objects in the R chunk below
- ANSWER: TYPE YOUR ANSWER HERE

```
#object 1
x1 <- c(TRUE, FALSE, FALSE, TRUE)


#object 2
x2 <- c(animal="dog", food="kibble", habitat="home", type="domestic")
```

Question 3: How are the two objects below similar and/or different?

- I have already created two objects in the R chunk below: `x3` and `x4`
- Run diagnostics of these objects in the R chunk below
- ANSWER: TYPE YOUR ANSWER HERE

```
#object 1
x3 <- list(var1=c(1,2), var2=c("public", "private"), var3=c("AZ", "CA"))

#object 2
x4 <- c(1,2,"public", "private", "AZ", "CA")
```

Question 4: Access the "var2" element in the `x3` object below. What's the length and type of the var2 element in `x3`? Does the var2 element have a hierarchical structure?

- I have already re-created the `x3` object in the R chunk below
- Run diagnostics of the "var2" element in the `x3` object in the R chunk below
- ANSWER: TYPE YOUR ANSWER HERE

```
#object 1
x3 <- list(var1=c(1,2), var2=c("public", "private"), var3=c("AZ", "CA"))
```

Knit to pdf select the “Knit” tab (icon with blue yarn ball) or scroll down and “Knit to PDF”
- Submit both .Rmd and pdf - Use this naming convention “lastname_module1_ps.Rmd”