Worksheet demo 1

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Answer the following questions by typing the appropriate code in the code boxes (denoted by "' signs). Each line of code that you are responsible for will already have a <- arrow. Leave the following line as it is, that line will show me the console output in the final document. When you have answered all of the questions, double-check your work, be sure the author line above contains your full name

(for example: author: "Liam Mueller")

and finally hitting the Knit button above. Save the file with your name and the week number in the file name

(for example: " $Liam_Mueller_1$ ").

Questions:

1. Assign to a vector called X the values 1,3,5,6,7, and 9. Assign to a vector called Y the values 2,7,4,5,2 and 12.

```
X<- c(1,3,5,6,7,9)

X

## [1] 1 3 5 6 7 9

Y<- c(2,7,4,5,2,12)

Y

## [1] 2 7 4 5 2 12
```

2. Concatenate (combine) the two vectors together as one larger vector called ${\bf Z}.$

Z <- c(X,Y)
Z

[1] 1 3 5 6 7 9 2 7 4 5 2 12

3. Create a new vector that includes all the values in Z that are less than 6.

newZ<- Z[Z<6]
newZ</pre>

[1] 1 3 5 2 4 5 2

4. Using R functions, calculate the mean of Z.

meanZ<- mean(Z)
meanZ</pre>

[1] 5.25

5. Using R functions, calculate the length of X.

lengthX<- 1

Error in eval(expr, envir, enclos): object 'l' not found