

# ICPSR: Network Analysis I

## Assignment 2

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Before we begin, make sure that you have R and RStudio properly installed. Write a single R script (a .R file) that answers each of the following questions. Simply comment out text that you write to answer each question, and ensure that the code you write can be ran on any computer.

1. Write code to perform the following tasks for any numbers  $x$  and  $y$

- (a)  $\ln(x + y)$
- (b)  $\log_{10}(xy/2)$
- (c)  $2\sqrt[3]{x} + \sqrt[4]{y}$
- (d)  $10^{x-y} + \exp\{xy\}$

2. Why does the following code not work?

```
my_variable <- 10
my_varlable
#> Error in eval(expr, envir, enclos): object 'my_varlable' not found
```

This is in fact a simple question; however, it is important to get yourself well-trained at seeing such errors for when coding gets a lot longer and more difficult.

3. While in R, press Alt + Shift + K. What happens? How can you get to the same place using menus?
4. The term *Big Data* is used frequently these days, but a formal definition does not really exist. I provided one commonly used definition in the lecture. Discuss what *Big Data* means to you and where you've run across the term. If you have not witnessed the term before, find an article or website that uses it and talk about its use in that article.