STT 301 Quiz 3 Solutions
September 19, 2018

Name: ———————————————— PID: ———————————————

Directions: Answer two of the three questions below. Write "Do Not Grade" in the blank space of the question you do not want me to grade. If you answer all three questions, I will only grade the first two questions. Each question is worth 1 point. The > before any variable assignment is the prompt as you would see if you were typing this code in the RStudio console.

1. Consider the below code. What is the result of

```
> rep(0, length = 3)

[1] 0 0 0
```

2. Consider a list `my_list` where the first element of the list is a vector named `my_vec`. Briefly explain the difference in what R returns between `my_list["my_vec"]` and `my_list[["my_vec"]]`.

   The use of `[[]]` will return the vector `my_vec`. The use of `[]` will return a list with one element in that list, that being `my_vec`.

3. Consider two vectors `x` and `y`.

```
> x <- seq(from = -1, to = 1, by = 0.5)
> y <- c(TRUE, FALSE, FALSE, FALSE, TRUE)
```

   What is the result of

```
> x[y]

[1] -1  1
```