STATS 60 Summer 2020: HW1

Due on Friday July 3rd at 5PM PDT on Gradescope

1) Summarizing Data

Consider the following dataset

$$\{6, 8, 7, 9, 3, 7, 7, 10, 8, 2\}$$

1) What is the mean?
2) What is the median?
3) What is the mode?
4) What is the standard deviation?

2) Introduction to R

1) Assign the character string "10" to `x` and "20" to `y`
2) What happens when you run `x + y`? Why does this happen?
3) How would we treat `x` and `y` as numbers to add them?
4) Suppose I wanted to print the string "STATS60". I run the following code. Why do I get the following error? What should I do instead?

```
print(STATS60)
```

```
## Error in print(STATS60) : object 'STATS60' not found
```

Suppose now I wanted to print the string "060". I run the following code. Why do I get the incorrect output? What should I do instead?

```
print(060)
```

```
## [1] 60
```

3) R for Data

1) Create a vector `v` of the data from Part 1.
2) Create a histogram of `v`
3) Create a boxplot of `v`. What is your interpretation of this?
4) Write code that gives you the mean and standard deviation of `v`.