STA444 Assignment 1

Richard McCormick

8/28/2023

```
knitr::opts_chunk$set(echo = TRUE)
```

Excercise 1

Calculate log(6.2) first using base e and second using base 10.

```
log( 6.2, base = exp( 1 ) )
```

```
## [1] 1.824549
```

```
log( 6.2, base = 10 )
```

```
## [1] 0.7923917
```

Excercise 2

Calculate the square root of 2 and save the result as the variable named sqrt2. Have R display the decimal value of sqrt2.

```
sqrt2 = sqrt( 2 )
sqrt2
```

```
## [1] 1.414214
```

Excercise 3

a. Install the package Sleuth3 on your computer using RStudio.
b. Load the package using the library() command.
c. Print out the dataset case0101.

```
library( "Sleuth3" )
```

```
## Warning: package 'Sleuth3' was built under R version 4.1.3
```

```
case0101
```

```
##    Score Treatment
## 1    5.0 Extrinsic
## 2    5.4 Extrinsic
## 3    6.1 Extrinsic
## 4   10.9 Extrinsic
## 5   11.8 Extrinsic
## 6   12.0 Extrinsic
## 7   12.3 Extrinsic
## 8   14.8 Extrinsic
## 9   15.0 Extrinsic
```

```
## 10  16.8 Extrinsic
## 11  17.2 Extrinsic
## 12  17.2 Extrinsic
## 13  17.4 Extrinsic
## 14  17.5 Extrinsic
## 15  18.5 Extrinsic
## 16  18.7 Extrinsic
## 17  18.7 Extrinsic
## 18  19.2 Extrinsic
## 19  19.5 Extrinsic
## 20  20.7 Extrinsic
## 21  21.2 Extrinsic
## 22  22.1 Extrinsic
## 23  24.0 Extrinsic
## 24  12.0 Intrinsic
## 25  12.0 Intrinsic
## 26  12.9 Intrinsic
## 27  13.6 Intrinsic
## 28  16.6 Intrinsic
## 29  17.2 Intrinsic
## 30  17.5 Intrinsic
## 31  18.2 Intrinsic
## 32  19.1 Intrinsic
## 33  19.3 Intrinsic
## 34  19.8 Intrinsic
## 35  20.3 Intrinsic
## 36  20.5 Intrinsic
## 37  20.6 Intrinsic
## 38  21.3 Intrinsic
## 39  21.6 Intrinsic
## 40  22.1 Intrinsic
## 41  22.2 Intrinsic
## 42  22.6 Intrinsic
## 43  23.1 Intrinsic
## 44  24.0 Intrinsic
## 45  24.3 Intrinsic
## 46  26.7 Intrinsic
## 47  29.7 Intrinsic
```