Lab 01

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Skills

In this lab, we will practice computing descriptive statistics and making plots in R for a dataset about animal sleep habits. First, download the template R Markdown file for Lab 01 here. Open the template in RStudio.

In R Markdown files, you can switch between text and code. This line is text, but below is a code chunk. Code chunks look like this.

```
```{r CHUNK_NAME, CHUNK_OPTIONS}
# YOUR CODE HERE
```
```

In your template file, the first code chunk has the name `load_data` and the options `warning = F, message = F`

```
# load package of helpful datasets and functions
library(tidyverse)

# load sleep dataset
data("msleep")

?msleep

# print out the first few rows
head(msleep)
```

```
## # A tibble: 6 x 11
##   name  genus vore  order conservation sleep_total sleep_rem sleep_cycle
##   <chr> <chr> <chr> <chr> <chr>              <dbl>     <dbl>       <dbl>
## 1 Chee~ Acin~ carni Carn~ lc                  12.1      NA        NA
## 2 Owl ~ Aotus omni  Prim~ <NA>                17         1.8      NA
## 3 Moun~ Aplo~ herbi Rode~ nt                  14.4       2.4      NA
## 4 Grea~ Blar~ omni  Sori~ lc                  14.9       2.3       0.133
## 5 Cow   Bos   herbi Arti~ domesticated         4         0.7       0.667
## 6 Thre~ Brad~ herbi Pilo~ <NA>                14.4       2.2       0.767
## # ... with 3 more variables: awake <dbl>, brainwt <dbl>, bodywt <dbl>
```

We will be calculating descriptive statistics of some GPS data describing the location of an invasive bird species on the island of Nusa Penida, Indonesia. Specifically, we will look at the Horizontal Dilution of Precision (or HDOP) of each location recording. The HDOP is an indicator of the accuracy for each recording (higher values indicate lower accuracy). We'd like to explore some statistics to get an idea of the quality of the GPS data.