Bellabeat Case Study

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##Setting Up My Environment Notes: Setting up my environment by loading the 'tidyverse', 'lubridate', 'here', 'janitor', and 'skimr' packages.

```
library(tidyverse)
## -- Attaching packages ----- tidyverse 1.3.2 --
## v ggplot2 3.4.0
                      v purrr
                                1.0.1
## v tibble 3.1.8
                                1.0.10
                      v dplyr
## v tidyr 1.2.1
                     v stringr 1.5.0
           2.1.3
## v readr
                      v forcats 0.5.2
## -- Conflicts -----
                                        ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                   masks stats::lag()
library(lubridate)
## Loading required package: timechange
## Attaching package: 'lubridate'
## The following objects are masked from 'package:base':
##
##
      date, intersect, setdiff, union
library(here)
## here() starts at /cloud/project
library(skimr)
library(janitor)
## Attaching package: 'janitor'
## The following objects are masked from 'package:stats':
##
##
      chisq.test, fisher.test
##Importing the Datasets
daily_activity <- read.csv("Bellabeat Project/dailyActivity_merged.csv")</pre>
daily_sleep <- read.csv("Bellabeat Project/sleepDay_merged.csv")</pre>
weight_log <- read.csv("Bellabeat Project/weightLogInfo_merged.csv")</pre>
```

###Double Checking Datasets

```
head(daily_activity)
             Id ActivityDate TotalSteps TotalDistance TrackerDistance
                    4/12/2016
## 1 1503960366
                                   13162
                                                   8.50
                    4/13/2016
## 2 1503960366
                                   10735
                                                   6.97
                                                                    6.97
## 3 1503960366
                    4/14/2016
                                   10460
                                                   6.74
                                                                    6.74
## 4 1503960366
                   4/15/2016
                                    9762
                                                   6.28
                                                                    6.28
## 5 1503960366
                                                   8.16
                    4/16/2016
                                   12669
                                                                    8.16
## 6 1503960366
                    4/17/2016
                                    9705
                                                   6.48
                                                                    6.48
     LoggedActivitiesDistance VeryActiveDistance ModeratelyActiveDistance
## 1
                             0
                                              1.88
                                                                        0.55
## 2
                             0
                                              1.57
                                                                        0.69
## 3
                             0
                                              2.44
                                                                        0.40
## 4
                             0
                                              2.14
                                                                        1.26
## 5
                             0
                                                                        0.41
                                              2.71
## 6
                             0
                                              3.19
                                                                        0.78
##
     LightActiveDistance SedentaryActiveDistance VeryActiveMinutes
                     6.06
## 1
                                                 0
## 2
                     4.71
                                                                   21
## 3
                     3.91
                                                 0
                                                                   30
                                                                   29
## 4
                     2.83
                                                 0
## 5
                     5.04
                                                                   36
## 6
                     2.51
                                                 0
                                                                   38
     FairlyActiveMinutes LightlyActiveMinutes SedentaryMinutes Calories
## 1
                                                              728
                       13
                                            328
                                                                      1985
## 2
                       19
                                            217
                                                              776
                                                                      1797
## 3
                       11
                                            181
                                                             1218
                                                                      1776
## 4
                       34
                                            209
                                                              726
                                                                      1745
## 5
                       10
                                            221
                                                              773
                                                                      1863
## 6
                       20
                                            164
                                                              539
                                                                      1728
colnames(daily_activity)
    [1] "Id"
##
                                     "ActivityDate"
   [3] "TotalSteps"
##
                                     "TotalDistance"
   [5] "TrackerDistance"
                                     "LoggedActivitiesDistance"
   [7] "VeryActiveDistance"
                                     "ModeratelyActiveDistance"
  [9] "LightActiveDistance"
                                     "SedentaryActiveDistance"
## [11] "VeryActiveMinutes"
                                     "FairlyActiveMinutes"
## [13] "LightlyActiveMinutes"
                                     "SedentaryMinutes"
## [15] "Calories"
head(daily_sleep)
##
                              SleepDay TotalSleepRecords TotalMinutesAsleep
             Ιd
## 1 1503960366 4/12/2016 12:00:00 AM
                                                         1
                                                                          327
## 2 1503960366 4/13/2016 12:00:00 AM
                                                        2
                                                                          384
## 3 1503960366 4/15/2016 12:00:00 AM
                                                        1
                                                                          412
## 4 1503960366 4/16/2016 12:00:00 AM
                                                        2
                                                                          340
## 5 1503960366 4/17/2016 12:00:00 AM
                                                        1
                                                                          700
## 6 1503960366 4/19/2016 12:00:00 AM
                                                         1
                                                                          304
##
     TotalTimeInBed
## 1
                346
## 2
                407
## 3
                442
```

```
## 4
                367
## 5
                712
## 6
                320
colnames(daily_sleep)
## [1] "Id"
                            "SleepDay"
                                                  "TotalSleepRecords"
## [4] "TotalMinutesAsleep" "TotalTimeInBed"
head(weight_log)
##
                                 Date WeightKg WeightPounds Fat
## 1 1503960366
                5/2/2016 11:59:59 PM
                                          52.6
                                                    115.9631
                                                              22 22.65
## 2 1503960366 5/3/2016 11:59:59 PM
                                          52.6
                                                    115.9631 NA 22.65
## 3 1927972279 4/13/2016 1:08:52 AM
                                         133.5
                                                   294.3171 NA 47.54
## 4 2873212765 4/21/2016 11:59:59 PM
                                          56.7
                                                    125.0021 NA 21.45
## 5 2873212765 5/12/2016 11:59:59 PM
                                          57.3
                                                    126.3249 NA 21.69
## 6 4319703577 4/17/2016 11:59:59 PM
                                          72.4
                                                    159.6147 25 27.45
     IsManualReport
##
                           LogId
## 1
               True 1.462234e+12
## 2
               True 1.462320e+12
## 3
              False 1.460510e+12
## 4
               True 1.461283e+12
## 5
               True 1.463098e+12
## 6
               True 1.460938e+12
colnames(weight_log)
## [1] "Id"
                                         "WeightKg"
                                                           "WeightPounds"
                        "Date"
## [5] "Fat"
                        "BMI"
                                         "IsManualReport" "LogId"
```