

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.5    v purrr  0.3.4
## v tibble  3.1.6    v dplyr  1.0.7
## v tidyr   1.1.4    v stringr 1.4.0
## v readr   2.1.1    v forcats 0.5.1
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
library(lubridate)
```

```
##
## Attaching package: 'lubridate'
```

```
## The following objects are masked from 'package:base':
##
##     date, intersect, setdiff, union
```

```
setwd("fitbitdat")
dayact = read_csv("dailyActivity_merged.csv")
```

```
## Rows: 940 Columns: 15
```

```
## -- Column specification -----
## Delimiter: ","
## chr (1): ActivityDate
## dbl (14): Id, TotalSteps, TotalDistance, TrackerDistance, LoggedActivitiesDi...
```

```
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```
daycal = read_csv("dailyCalories_merged.csv")
```

```
## Rows: 940 Columns: 3
```

```
## -- Column specification -----
## Delimiter: ","
## chr (1): ActivityDay
## dbl (2): Id, Calories
```

```
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
```

```

dayint = read_csv("dailyIntensities_merged.csv")

## Rows: 940 Columns: 10

## -- Column specification -----
## Delimiter: ","
## chr (1): ActivityDay
## dbl (9): Id, SedentaryMinutes, LightlyActiveMinutes, FairlyActiveMinutes, Ve...

##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.

daystp = read_csv("dailySteps_merged.csv")

## Rows: 940 Columns: 3

## -- Column specification -----
## Delimiter: ","
## chr (1): ActivityDay
## dbl (2): Id, StepTotal

##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.

daytotal = cbind(dayact, daycal, dayint, daystp)

daytotalx = daytotal[!duplicated(as.list(daytotal))]

names(daytotalx)

## [1] "Id" "ActivityDate"
## [3] "TotalSteps" "TotalDistance"
## [5] "TrackerDistance" "LoggedActivitiesDistance"
## [7] "VeryActiveDistance" "ModeratelyActiveDistance"
## [9] "LightActiveDistance" "SedentaryActiveDistance"
## [11] "VeryActiveMinutes" "FairlyActiveMinutes"
## [13] "LightlyActiveMinutes" "SedentaryMinutes"
## [15] "Calories"

print(cor(daytotalx$VeryActiveDistance, daytotalx$Calories))

## [1] 0.4919586

print(cor(daytotalx$ModeratelyActiveDistance, daytotalx$Calories))

## [1] 0.2167899

```

```
print(cor(daytotalx$LightActiveDistance,daytotalx$Calories))
```

```
## [1] 0.4669168
```

```
print(cor(daytotalx$SedentaryActiveDistance,daytotalx$Calories))
```

```
## [1] 0.04365187
```

```
print(cor(daytotalx$VeryActiveMinutes,daytotalx$Calories))
```

```
## [1] 0.6158383
```

```
print(cor(daytotalx$FairlyActiveMinutes,daytotalx$Calories))
```

```
## [1] 0.2976235
```

```
print(cor(daytotalx$LightlyActiveMinutes,daytotalx$Calories))
```

```
## [1] 0.2867175
```

```
print(cor(daytotalx$SedentaryMinutes,daytotalx$Calories))
```

```
## [1] -0.106973
```