```
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
```

```
hourcal = read_csv("fitbitdat/hourlyCalories_merged.csv")
```

```
## Rows: 22099 Columns: 3

## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr (1): ActivityHour
## 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.
```

```
hourint = read_csv("fitbitdat/hourlyIntensities_merged.csv")
```

```
## Rows: 22099 Columns: 4

## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr (1): ActivityHour
## dbl (3): Id, TotalIntensity, AverageIntensity

##
## 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.
```

```
hourstp = read_csv("fitbitdat/hourlySteps_merged.csv")
```

```
## Rows: 22099 Columns: 3
```

```
## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr (1): ActivityHour
## 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.
```

```
hourtotal = cbind(hourcal,hourint,hourstp)
```

```
hourtotalx = hourtotal[!duplicated(as.list(hourtotal))]
```

```
names(hourtotalx)
```

```
## [1] "Id"               "ActivityHour"     "Calories"         "TotalIntensity"
## [5] "AverageIntensity" "StepTotal"
```

```
print(cor(hourtotalx$TotalIntensity,hourtotalx$Calories))
```

```
## [1] 0.8966161
```

```
print(cor(hourtotalx$AverageIntensity,hourtotalx$Calories))
```

```
## [1] 0.8966161
```

```
print(cor(hourtotalx$StepTotal,hourtotalx$Calories))
```

```
## [1] 0.814968
```

```
write_csv(hourtotalx,"hourly_data_comb.csv")
```