

Homework Week 7 Part 1

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

Homework Week 7 Part 1:

```
setwd("C:/Users/Matt/Desktop")

## Load the `data/r4ds/heights.csv` to
heights_df <- read.csv("heights.csv")

## Using `cor()` compute correlation coefficients for
## height vs. earn
cor1 <- cor(heights_df$height, heights_df$earn, use = "all.obs", method = "pearson")
print(cor1)
```

```
## [1] 0.2418481
```

```
### age vs. earn
cor(heights_df$age, heights_df$earn, use = "all.obs", method = "pearson")
```

```
## [1] 0.08100297
```

```
### ed vs. earn
cor(heights_df$ed, heights_df$earn, use = "all.obs", method = "pearson")
```

```
## [1] 0.3399765
```

```
## Spurious correlation
## The following is data on US spending on science, space, and technology in millions of today
## and Suicides by hanging strangulation and suffocation for the years 1999 to 2009
## Compute the correlation between these variables

tech_spending <- c(18079, 18594, 19753, 20734, 20831, 23029, 23597, 23584, 25525, 27731, 29449)
suicides <- c(5427, 5688, 6198, 6462, 6635, 7336, 7248, 7491, 8161, 8578, 9000)

cor(tech_spending, suicides, use = "all.obs", method = "spearman")
```

```
## [1] 0.9727273
```