

# Assignment 5

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**Set the working directory to the root of your DSC 520 directory**

```
setwd("C:/Users/runek/dsc520")
```

**Load the data/r4ds/heights.csv to**

```
heights_df <- read.csv("data/r4ds/heights.csv")
```

```
install.packages("Hmisc"); install.packages("ggm"); install.packages("ggplot2"); install.packages("polycor")  
library(boot); library(ggm); library(ggplot2); library(Hmisc); library(polycor)
```

**Using cor() compute correlation coefficients for**

**height vs. earn**

```
cor(heights_df$height, heights_df$earn, use = "everything")
```

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

**age vs. earn**

```
cor(heights_df$age, heights_df$earn, use = "everything")
```

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

**ed vs. earn**

```
cor(heights_df$ed, heights_df$earn, use = "everything")
```

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

## Spurious correlation

The following is data on US spending on science, space, and technology in millions of today's dollars 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 = "everything")
```

```
## [1] 0.9920817
```