In Class

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```
library(here)
library(tidyverse)
```

1 Regression Exercises

a) Check whether victim's families and neighbors were similar to those of non-victims at baseline. That is, compare the turnout rates *prior to* 9/11 between the two groups.

```
v911 <- read_csv(here("v911.csv"))
```

b) Estimate a linear model to predict turnout in 2002 using pretreatment turnout, age, sex, and median income (in 1000's of dollars), and whether the registrant lost a family member or neighbor in the 9/11 attack. Save the output as `lm_v911`.

c) Inspect `lm_v911`. `summary(lm_v911)` offers more detail. Does each predictor have a positive or negative association with turnout?

d) Interpret the coefficient on sex. What does the number you obtained mean, in terms of predicting turnout? Is this a causal or descriptive quantity?

e) Interpret the coefficient on treatment. What does the number you obtained mean, in terms of predicting turnout? Is this a causal or descriptive quantity?

f) Predict the turnout probability for a prior voter, age 40, female, living with 2 family members, who had a family member die in the 9/11 attack.

g) Estimate the same linear model, this time predicting turnout in 2004. Does the relationship between turnout and losing a relative or neighbor appear stronger, weaker, or about the same as in 2002?

h) Suppose we are interested in whether the *effect* of the treatment varies by sex. That is, we are interested in whether men and women's turnout is differently *affected* by treatment, not whether men's and women's turnout simply differs in level. Estimate a linear model for turnout on treatment, sex, and their interaction. Does the treatment appear to have heterogeneous effects?

1.1 Beware the Green Arrow

```r
x <- 1:10

mean(y)
```

1.2 Running Code

When you click the **Render** button a document will be generated that includes both content and the output of embedded code. You can embed code like this:

```r
1 + 1
```

```
[1] 2
```

You can add options to executable code like this

```
[1] 4
```

The `echo: false` option disables the printing of code (only output is displayed).