Introduction to `Modesummary` package

Your name here

1 Data

```
data(CPS1988)
# I prefer to conver the data to data.table.
setDT(CPS1988)
```

I created this document to show how summary tables created by `modelsummary`package look like on the PDF output. For more details about the package, see the `practice_modelsummary_html.qmd` file.

2 Lerning Objectives:

- By the end of this section, you know how to use the `modelsummary` package to create regression and summary tables that are of publication quality.

3 Introduction to `modelsummary` package

3.1 The Taste of `modelsummary` package

Below are the example tables created by `modelsummary` package. Don't try to understand the code for now. See the output tables.

```
datasummary(
  wage + education + experience ~ Mean + SD + Min + Max,
  data = CPS1988
  )
```

```
# change the base group for ethnicity to "cauc"
ex_dt <-
  copy(CPS1988) %>%
  .[,ethnicity := relevel(as.factor(ethnicity), ref = "cauc")]

ls_regs <-
  list(
```

Table 1: Example of Summary Statistics

	Mean	SD	Min	Max
wage	603.73	453.55	50.05	18 777.20
education	13.07	2.90	0.00	18.00
experience	18.20	13.08	−4.00	63.00

Table 2: Example regression results

	OLS 1	OLS 2	OLS 3
Education	0.076***	0.087***	0.086***
	(0.001)	(0.001)	(0.001)
Experience		0.078***	0.077***
		(0.001)	(0.001)
Experience squared		−0.001***	−0.001***
		(0.000)	(0.000)
White			−0.243***
			(0.013)
Num.Obs.	28 155	28 155	28 155
R2	0.095	0.326	0.335
R2 Adj.	0.095	0.326	0.335

* p < 0.05, ** p < 0.01, *** p < 0.001
Std. Errors in parentheses

```
    "OLS 1" = lm(log(wage) ~ education, data = ex_dt),
    "OLS 2" = lm(log(wage) ~ education + experience + I(experience^2), data = ex_dt),
    "OLS 3" = lm(log(wage) ~ education + experience + I(experience^2) + ethnicity, data
     ↪  = ex_dt)
  )

modelsummary(
  models = ls_regs,
  coef_map = c(
    "education" = "Education",
    "experience" = "Experience",
    "I(experience^2)" = "Experience squared",
    "ethnicityafam" = "White"
    ),
  stars  =  c("*" = .05, "**" = .01, "***" = .001),
  gof_map = c("nobs", "r.squared",  "adj.r.squared"),
  notes = list("Std. Errors in parentheses")
  )
```

4 Regression Tables with `modelsummary()` function

Let's start with the `modelsummary()` function to create a table.