Tables from Data

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Last updated September 13, 2018

By now, you should have:

- Downloaded R or Stata
- Understood wht's what in a GUI
- Read in the August 2018 Poll

READING IN

As we saw in the previous note, in R:

```r
library(tidyverse)

hh <- readRDS("data/input/2018-08/HHP_August2018_data.Rds")
```

And in Stata reading in a Stata dataset is through the use command

```stata
cd "data/input/2018-08"
use HHP_August2018_data, clear
```

SIMPLE TABLES IN R

```r
xtabs(formula = ~ QH01, data =  hh)
```

```
## QH01
##  Yes   No
## 1297  130
```

And in R, you can abbreviate the argument names if you give them in the order provided:

```
xtabs(~ QM3AR1 + QHO1, hh)
```

```
##                       QHO1
## QM3AR1                Yes  No
##    Strongly approve   375  39
##    Somewhat approve   352  29
##    Somewhat disapprove 220  24
##    Strongly disapprove 350  38
```

SIMPLE TABLES IN STATA

The tab (or tabulate) command

```
tab QM3AR1
```

```
        M3AR1 1. The |
 economy: M3 Do you |
          approve or |
  disapprove of the |
 job President Trump |      Freq.     Percent       Cum.
--------------------+---------------------------------
   Strongly approve |       414       29.01       29.01
   Somewhat approve |       381       26.70       55.71
 Somewhat disapprove |       244       17.10       72.81
 Strongly disapprove |       388       27.19      100.00
--------------------+---------------------------------
             Total |     1,427      100.00
```

Options come after the comma (look at help page for what options are available)

```
tab QM3AR1, sort
```

```
        M3AR1 1. The |
 economy: M3 Do you |
          approve or |
  disapprove of the |
 job President Trump |      Freq.     Percent       Cum.
--------------------+---------------------------------
   Strongly approve |       414       29.01       29.01
 Strongly disapprove |       388       27.19       56.20
   Somewhat approve |       381       26.70       82.90
```

```
Somewhat disapprove |          244          17.10         100.00
--------------------+-----------------------------------
            Total |        1,427         100.00
```

Cross-tabs

```
tab QM3AR1 QHO1
```

```
        M3AR1 1. The |
 economy: M3 Do you |
        approve or |     HO1 Do you have
   disapprove of the |    health insurance?
 job President Trump |       Yes          No |     Total
--------------------+----------------------+----------
    Strongly approve |       375          39 |       414
    Somewhat approve |       352          29 |       381
 Somewhat disapprove |       220          24 |       244
 Strongly disapprove |       350          38 |       388
--------------------+----------------------+----------
            Total |      1,297         130 |     1,427
```

DEFINING THE SURVEY IN R

To do more complex operations like using weights, use the survey package to define the properties of the dataset.

```
library(survey)
library(srvyr)
```

To set weights,

```
hh_svy <- svydesign(data = hh, ids = ~0, weights = ~Propwts)
```

To do cross-tabs (now with weights)

```
svytable(~ QM3AR1 + QHO1, hh_svy)
```

```
##                      QHO1
## QM3AR1                     Yes        No
##    Strongly approve    365.89978  40.35705
##    Somewhat approve    339.31558  28.33873
##    Somewhat disapprove 224.37649  28.15894
##    Strongly disapprove 360.98314  39.57034
```