

# Tuesday 2/11

Welcome! 👤

Announcements and reminders:

- Grades for g09-g11 are on Blackboard
- Exercises g12, g13 posted, due Friday  
Both require data from the class web page  
Will cover background for g13 on Thursday

Tips:

- Don't call the GroupBy .median() method with a column as an argument  
⇒ Argument is **ignored** and median() is applied to the **whole** data frame

```
In [62]: g = hh.groupby(['type'])
In [63]: g['etr'].median()
Out[63]:
type |
1     0.686044
2     0.645549
3     0.602345
4     0.528330
Name: etr, dtype: float64

In [64]: g.median(g['etr'])
Out[64]:
      inc      a      b      etr
type
1  68862.2  0.33785  175.5  0.686044
2  75452.4  0.31345  173.0  0.645549
3  82826.9  0.28865  175.0  0.602345
4  87934.7  0.26200  174.0  0.528330
```

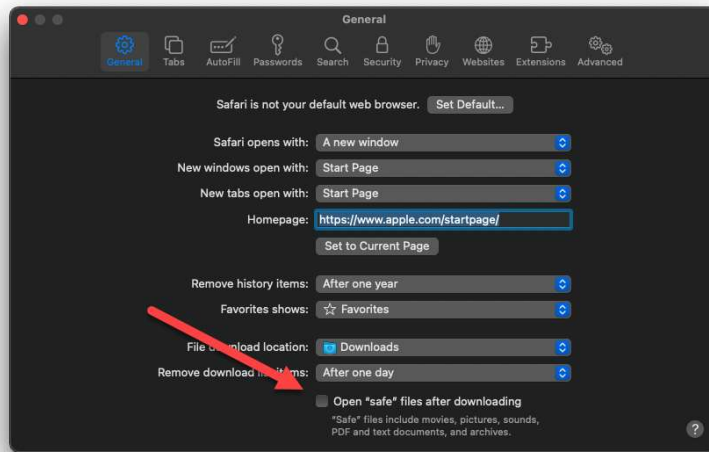
This is correct: computes the medians of the ETR column

This is incorrect: computes medians of all columns and should not have an argument.

- See the PDF in the Google Drive folder on **downloading data**  
How to download files without opening or unzipping them

Downloading **data** files with **Safari**:

Go to **Preferences** and **UNCHECK** "Open safe files after downloading":



- Definitions of Census regions (4) and divisions (9) for g12 demo:

