EC 220 - Class 1

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About me

- PhD student at the Paris School of Economics
- GTA at LSE
- Research interest: public economics
- Office Hours: Tuesdat 11:30 - 12:30 (32L.1.30)
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Important Information

- Class attendance policy.
- Problem sets:
  - Give it back before Monday, 4pm.
  - I will randomly mark half of them every week.
  - Include your log files
  - By email (preferably) or at my pigeonhole (room 32L.1.01)
- Mock exam at the end of the term (week 11).
- Lent Term Examination in LT Week 0 (duration: 2 hours)

Why a statistical software

- Computation power
- Flexibility and user-friendliness (basic programming)
- Reproductibility of your work:
  - Wide academic diffusion
  - Minimal direct hand-editing of data
  - Comments

About Stata

- Software for statistical analysis
- Not free, but runs on Windows and Unix environment (Mac and Linux)
- Very general human capital
  - One of the most used softwares for Economic Research...
  - ... as well as in many sectors
  - A first experience with statistical software

$\rightarrow$ Don't wait to pay that fixed cost!

Help in Stata

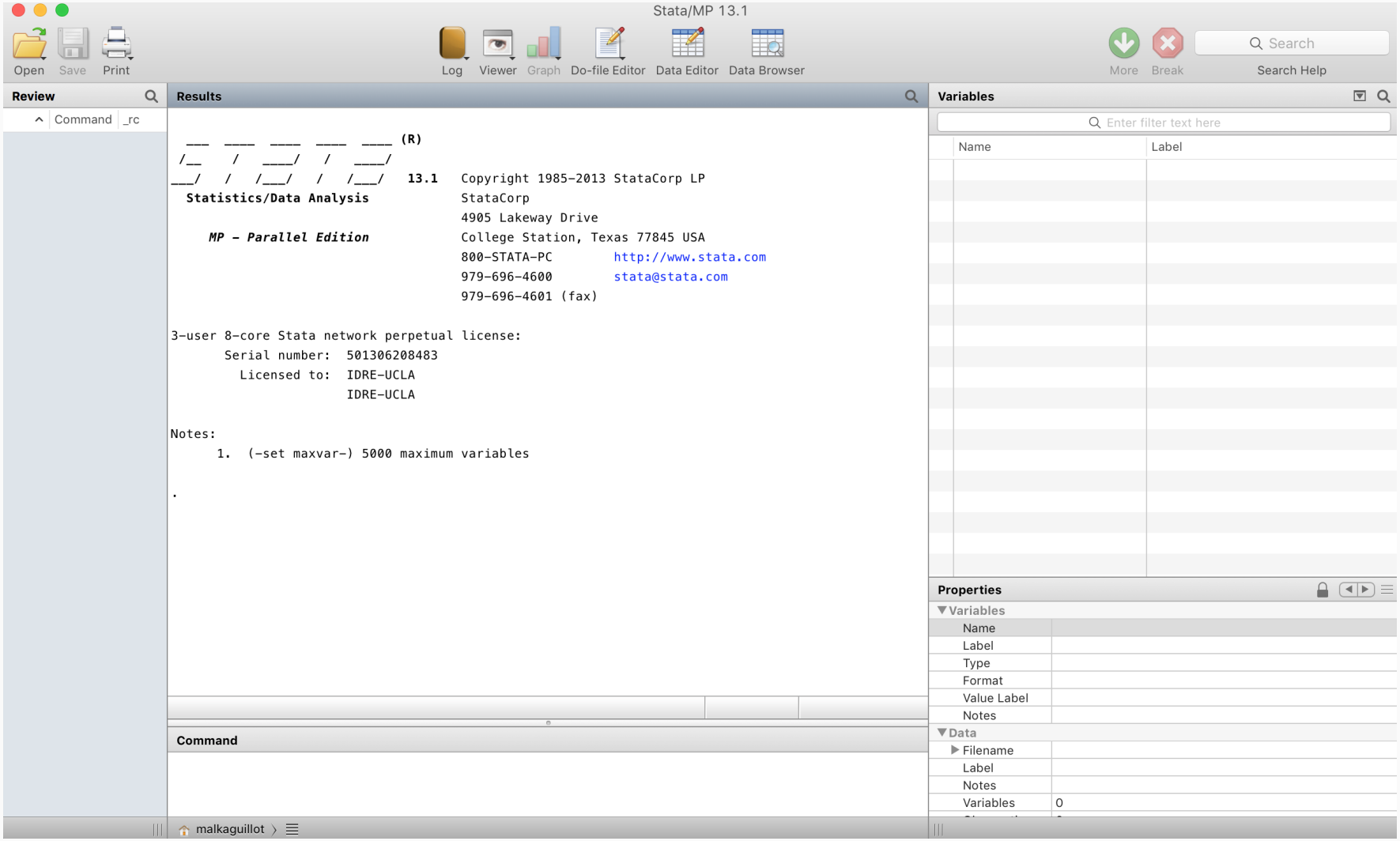
- At LSE:

Table 1: Stata support sessions weeks 3 & 4 - L32.G.18

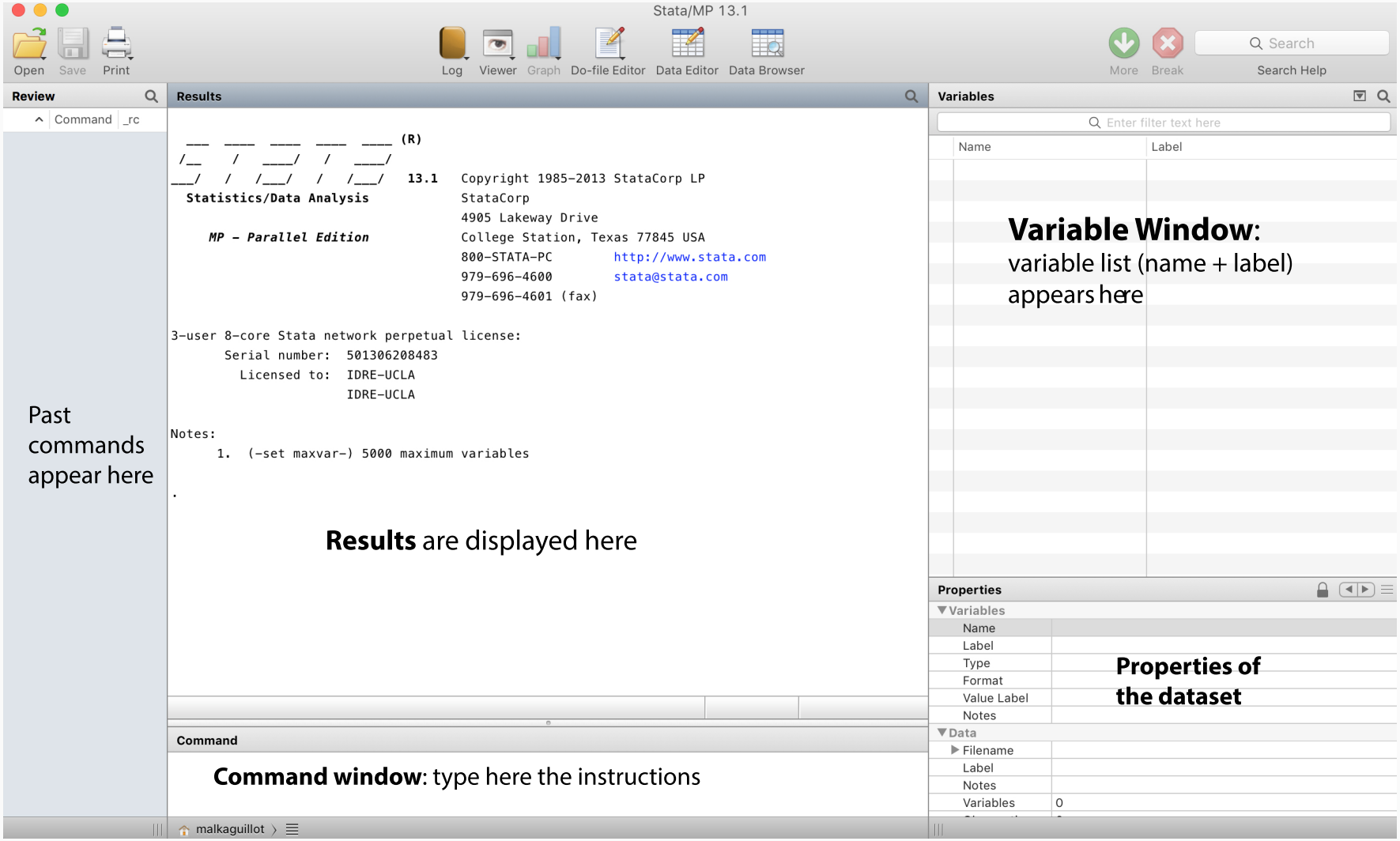
	Monday	Tuesday	Wednesday	Thursday	Friday
Week 3	16-17	14-15	15-16	10-11	12-13
Week 4	16-17	16-17	12-13	10-11	12-13

- Very complete help page accessible by internet or by the command window
  - Just type `help mycomand`

Stata interface



Stata interface



How do I primarily use Stata?

- Load a dataset in the Stata memory
- Run commands/dofiles to Stata
- Interpret, export, present results

Communicate with Stata:

- Toolbar

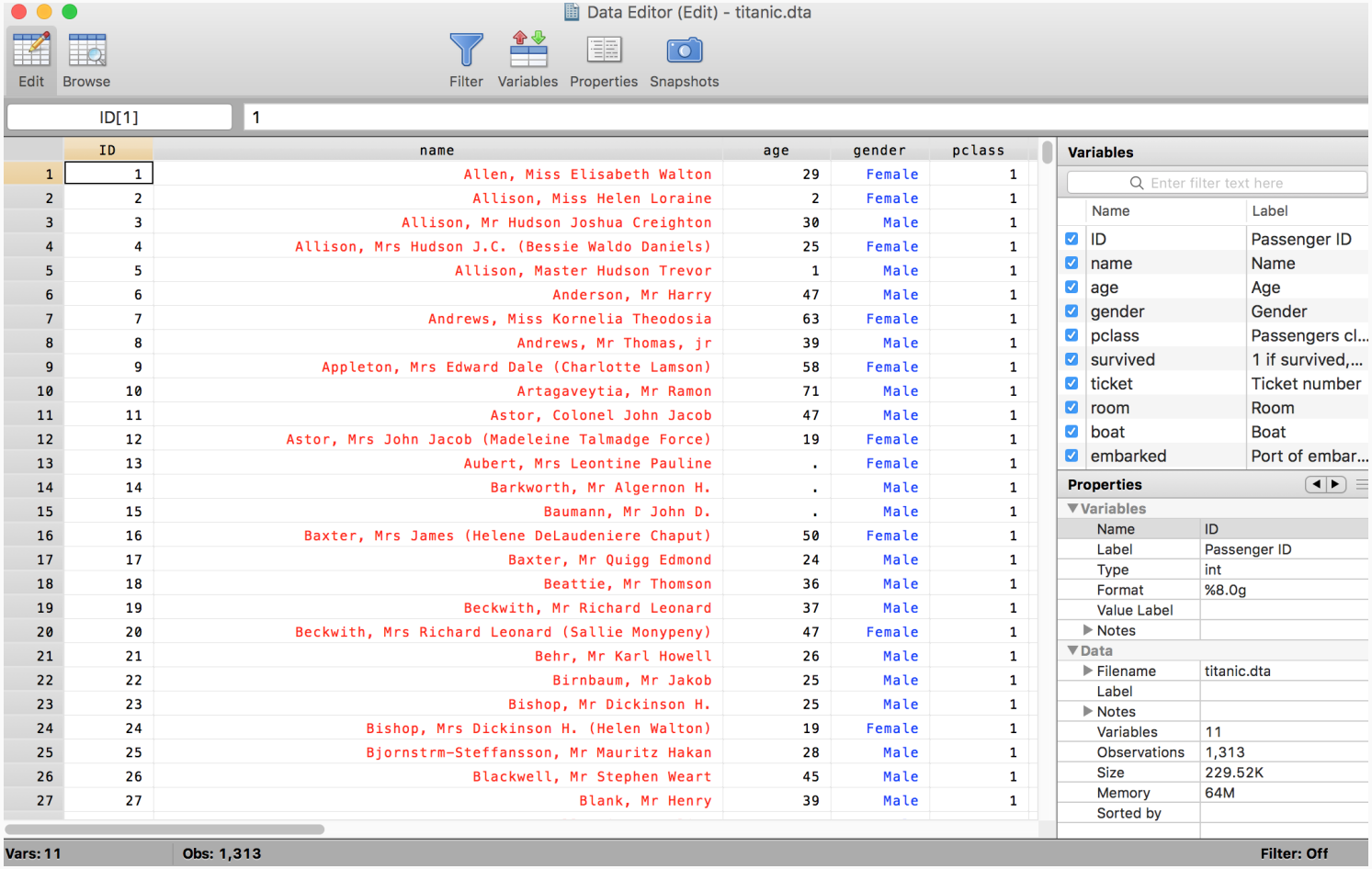
- Command window
- Dofile (next week)

First database

- Opening dataset
  - Go to Moodle Course page and download the dataset titanic, save it in a convenient directory
  - Open Stata: 
  - Open the dataset in Stata format (.dta):
    - in the menu, find **File** → **Open**
    - from the command bar:
      `use "C:/mypath/EC220/data/titanic.dta", clear`
- Variables appear in the variable window!

The titanic database

- Information on the passengers of the Titanic
- Each row = 1 individual
- Columns = variables



Have a look at your data

What information do we have?

- Browse = look at the data without being able to modify it → command: `browse [var]` = 
- Edit = allow you to change the data → command: `edit [var]` =  Beware! danger!
- "describing" your data gives you (sometimes) useful info on your dataset (for instance, the types and labels of your variables)
  `describe [vars]`
- "codebook" allows you to get some more info on variables
  `codebook [vars]`

Key statistics

Some questions:

- How many passengers/observations?
- What is the gender composition of the boat?
- What is the average age of the passengers?

Some statistical commands:

- To get the distribution of values of a variable:
  `tabulate myvariable`
- To get multiple variable distributions:
  `tabulate myvariable1 myvariable2`
- Count the number of observations:
  `count [if]`
- Summary statistics: `summarize [var], [detail]`

Modifying data

- Creating new variables:

  `generate newvar = EXPRESSION`

  `egenerate newvar = FUNCTION(other_variable)`
- Modifying the contents of existing variables:

  `replace var = other_var*2`
- Dropping and keeping
  - variables: `drop var1 var2` or `keep var1 var2`
  - observations: `drop if sexe == "Female"`

What to remember from today

- How to download and open datasets.
- Some general commands for describing the data.
- Some general commands for managing the data.
- Use the help files.
- Practice!

Next time

- Dofiles
- Logfiles
- Conditioning commands