Contents

Introduction

- Illustration of why open source can be useful to academics

- the open source tool that I use most often is emacs

Why I love emacs

what is emacs?

- an editor which was designed in the 70s

- it is open source so the whole world can contribute

- unlike MS Word, the people "working on" emacs are "like us"

- I use "org-mode" developed by Carsten Dominik at UvA

- with customizations by John Kitchin at Carnegie Mellon

emacs contributers

- type papers in latex

- bibliographies in bibtex: C-c]

- work with data

- program

- have admin tasks: someone walks in and you have to remember something: C-M-r

- teach students: https://github.com/jkitchin/techela

why is it great?

amazing editor

- edit columns: get rid of the 2's

111333222 111333222 111333222 111333222

- change structure of file

latex stuff

- equations

  – this is an org-file but the latex things work in latex as well
  – use M-x org-cdlatex-mode
  – add equation

$$ref : eq : 5 \tag{1}$$

here are some other equations

$$\frac{1}{3} = x^2 \tag{2}$$

$$ax^2 + bx + c = 0 \tag{3}$$

$$ax^2 + bx + c = 0 \tag{4}$$

- refer to equations and export to latex

  – refer to an equation with C-c (
  – export to latex: C-c C-e
  – but you can also export to html and reveal
  – export with ox-manuscript: generates submission letter as well
  – easy to add links e.g. to a presentation at slide Data science
  – or to a bib tex file
  – add bibitex entry from doi-identifier: 10.1002/jae.896

highlighting

- most latex editors do not allow for meta data in latex:

- so most people make comments in bold in latex and pdf; then they send it to a conference...

- Use M-x ov-highlighter/body

- So here we have some text.

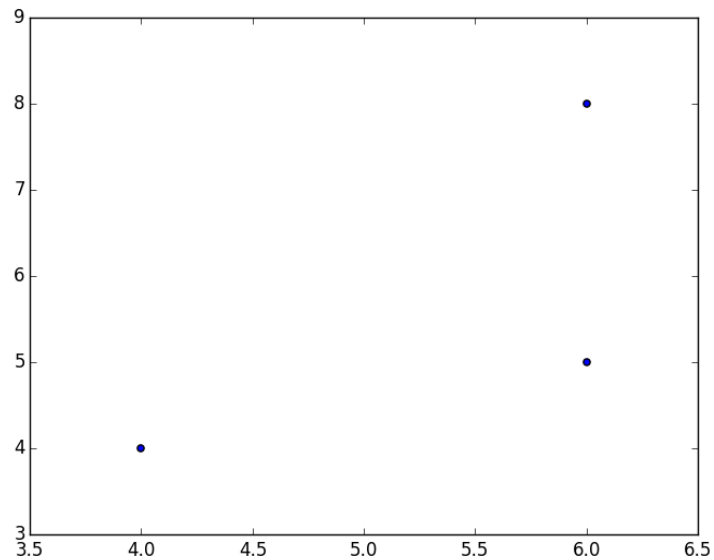- and here we add some comments that will not be exported to pdf

tables

- Latex is great, but not with tables...

- simple to add a table in emacs

1	2	3
a	a	a
b	b	b

- you can do excel stuff with it: C-c } to see "addresses"

col 1	col 2	col 3	mean
6	5	10	7
6	8	9	7.6666667
4	4	5	4.3333333

To do lists

TODO bla bla bla; use C-c C-t

- to add a date: C-c C-s

great extensions

- emacs spotify mode

- emacs weather mode

- emacs git: magit

Conclusion

- point is not that you have to use emacs

- but when you come across something in open source, you should certainly try it!