Install stuff

This guide assumes that you have already downloaded PyCharm

PyCharm can be found here:
https://www.jetbrains.com/pycharm/download/#section=mac

The "community edition" is great, you don't need "pro". Make sure you download the correct one for mac/windows/linux

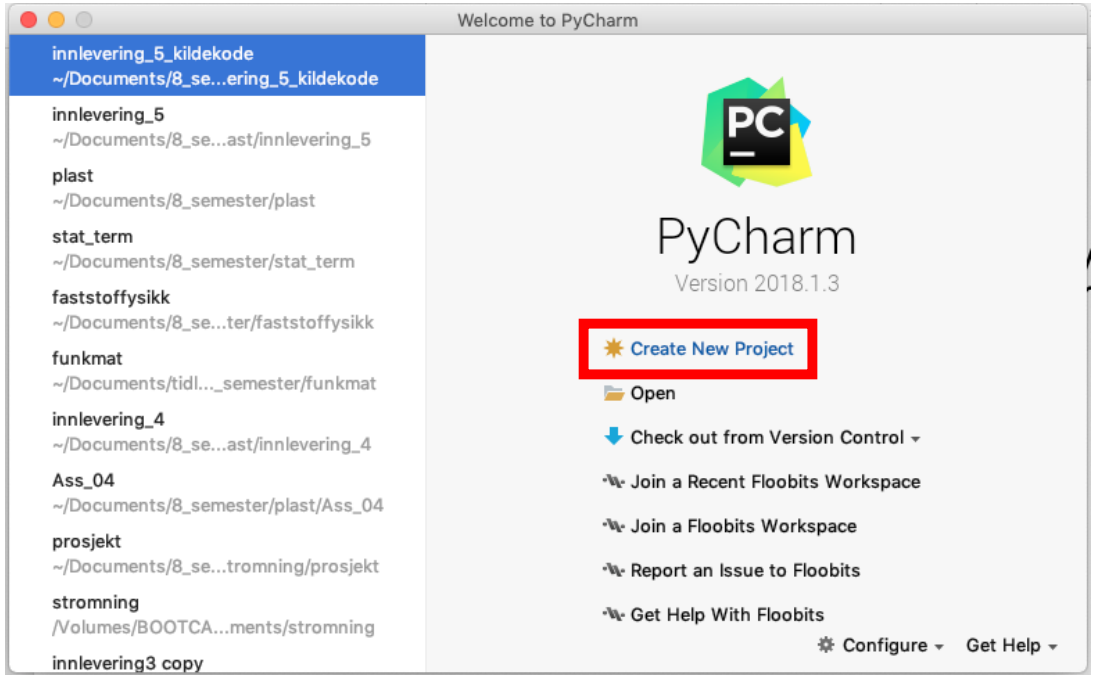
- These aren't the only ways to do things, but should be reasonably fail-safe
- Things may look a little different in different versions, but the names of the buttons and such should be pretty similar

Before we begin

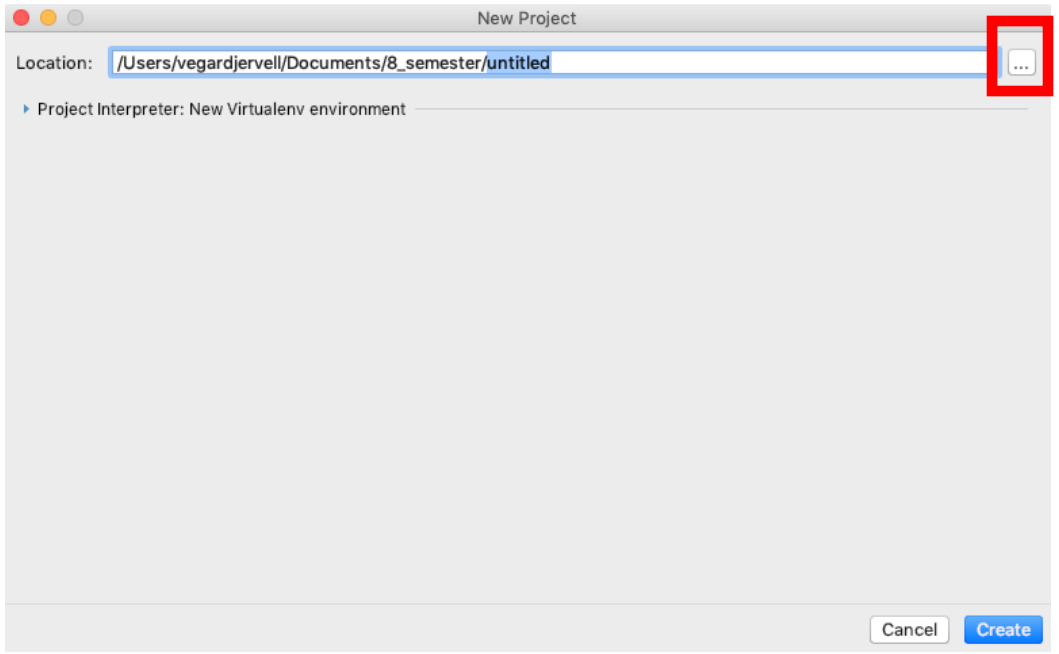
- There is a difference between whether things are located locally on your PC and whether they are located in the cloud.
- Especially on new machines, you can often be fooled into thinking that things are located locally when they're actually in OneDrive or iCloud Drive.
- It can save you a lot of confusion in the future if you know what on your PC is local and what is in the cloud.
- If your code is hosted on-premises, everything will probably run much faster than if it's in the cloud.
- On mac, local files are those located under '/Users//...'<mitt_navn>, while files in the cloud are located under '/OneDrive/...' or '<ett_eller_annet>//iCloud/...'
- On Windows, local files are those located under 'C:\<mitt_navn>Users\\...'
- Play around a bit in 'Finder' or 'file explorer' and find out what you have locally and what you have in the cloud before moving on.

- NB: This procedure must be repeated when starting a new project.

1) Open a new project



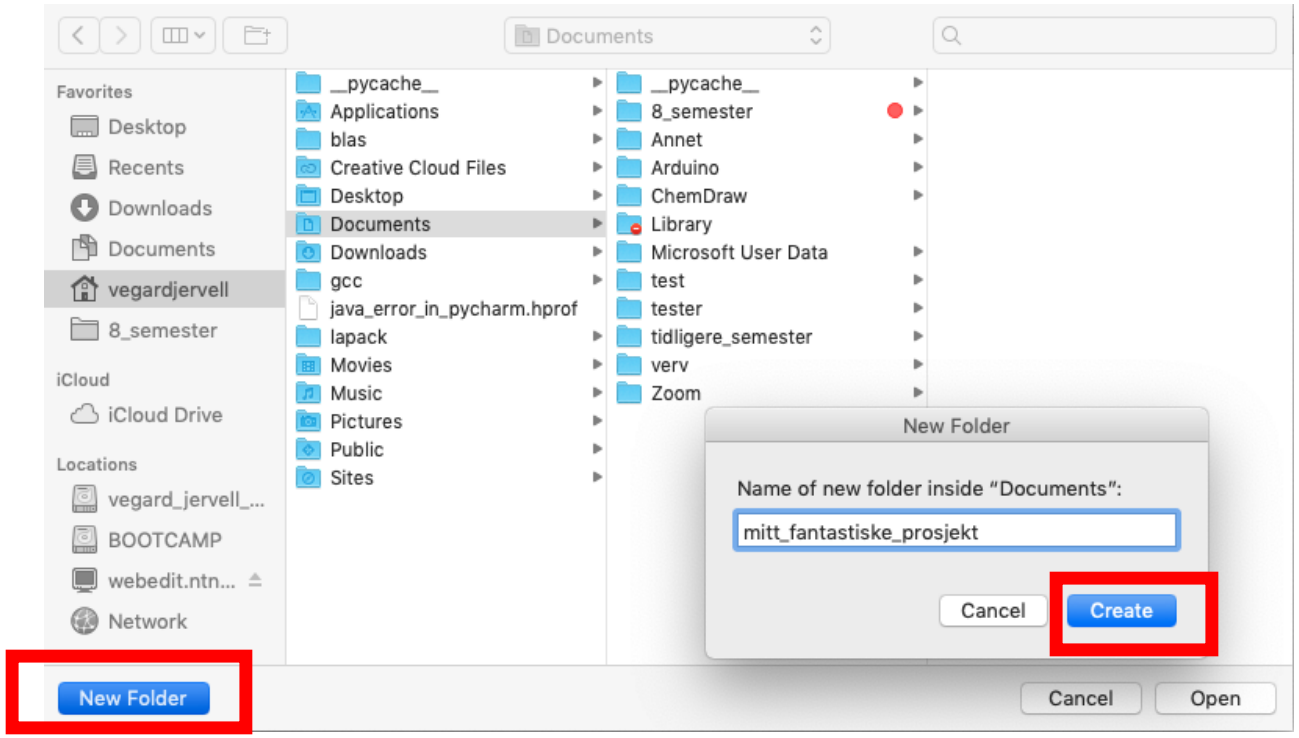
2a) Put it somewhere sensible* (NOT PyCharm Projects!)



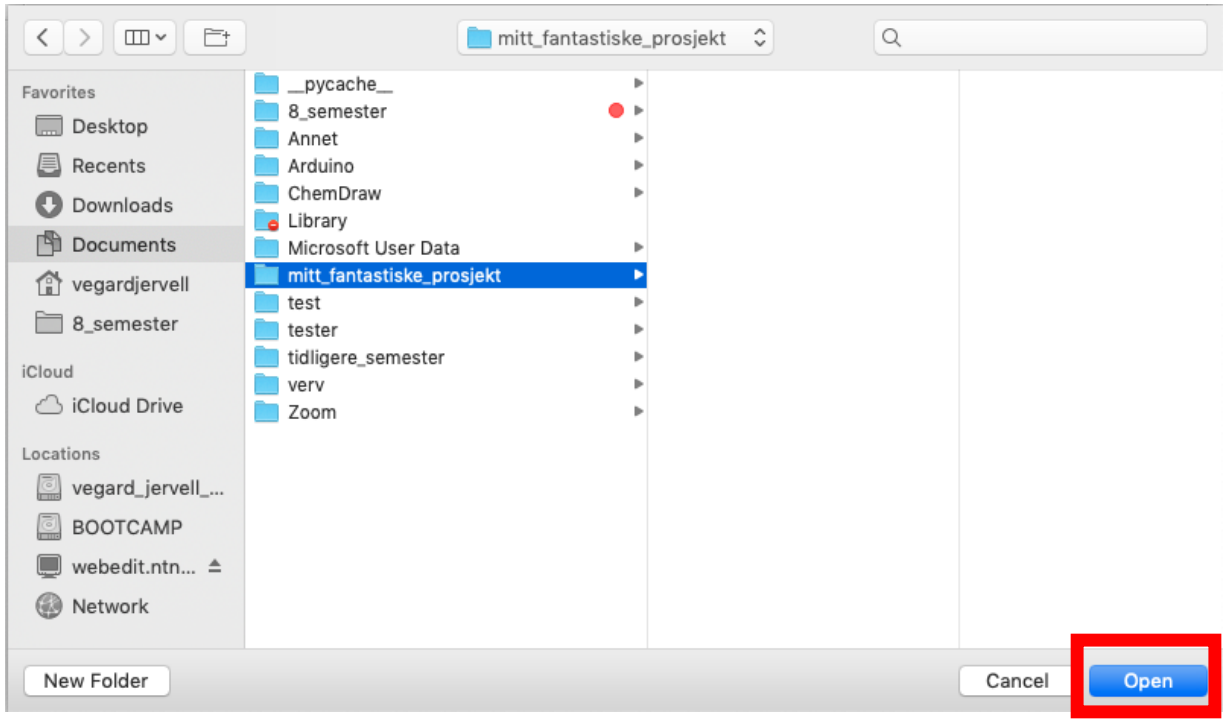
*A sensible place would be, for example, '/Users//<mitt_navn>Documents/mat1/code' (mac)
or 'C:\Users\\<mitt_navn>Documents\matte1\code' (windows) for files belonging to math 1.

NB: DO NOT have spaces or Norwegian characters in folder or file names
It can go well, but if you have bad luck it can mess things up, so it
Best to just avoid it

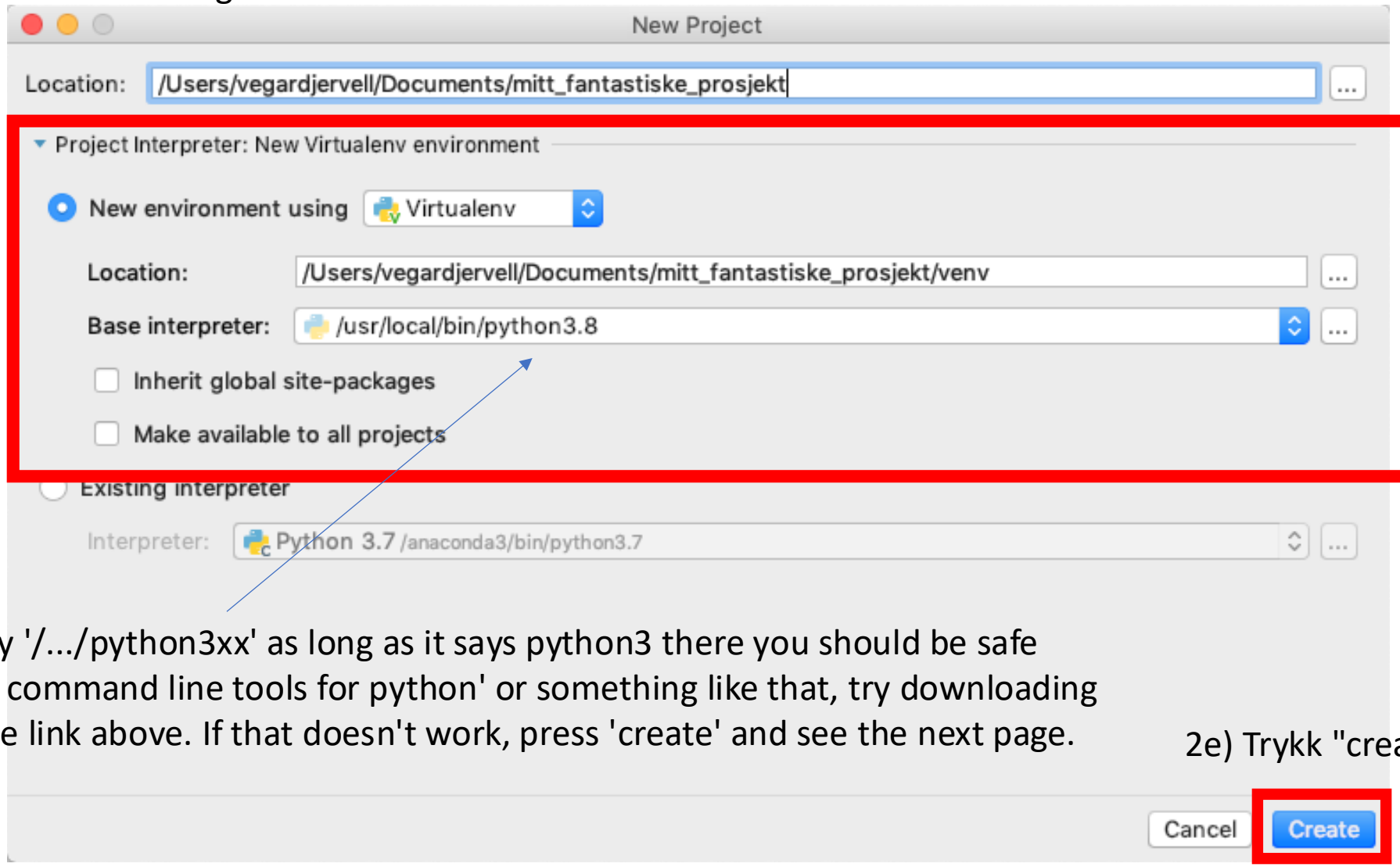
2b) Now we create the project folder



2c) Now we open the project folder



2d) Set up a "virtual environment". If you have installed Anaconda it is also possible to use a "Conda environment". Check that the "Base interpreter" is Python 3.7 or higher, if you don't have any Available Interpreter can be downloaded from: https://www.python.org/downloads/
Then you have to use the drop-down menu "Base interpreter" or click on the three dots and find the interpreterr after downloading it.



Here it must say '/.../python3xx' as long as it says python3 there you should be safe
If it says 'install command line tools for python' or something like that, try downloading python from the link above. If that doesn't work, press 'create' and see the next page.

2e) Trykk "create"

For newer Mac/Windows computers

- For mac:
- You may get a window that something went wrong and that you need to install 'command line developer tools' or similar. If so, tap on 'OK', wait for it to finish, delete the project folder, and start from the beginning.
- For Windows:
- You might also get an error message that 'Creating virtual environment failed' or something like that. Then you can try enabling 'developer mode' as they explain here: https://pureinfotech.com/enable-developer-mode-windows-11/

Infopause – What is a virtualenv?

- A virtual environment (virtualenv) creates a folder in your project. There is a copy of the python-interpreter you have chosen. By default, it is put in a folder called "venv“
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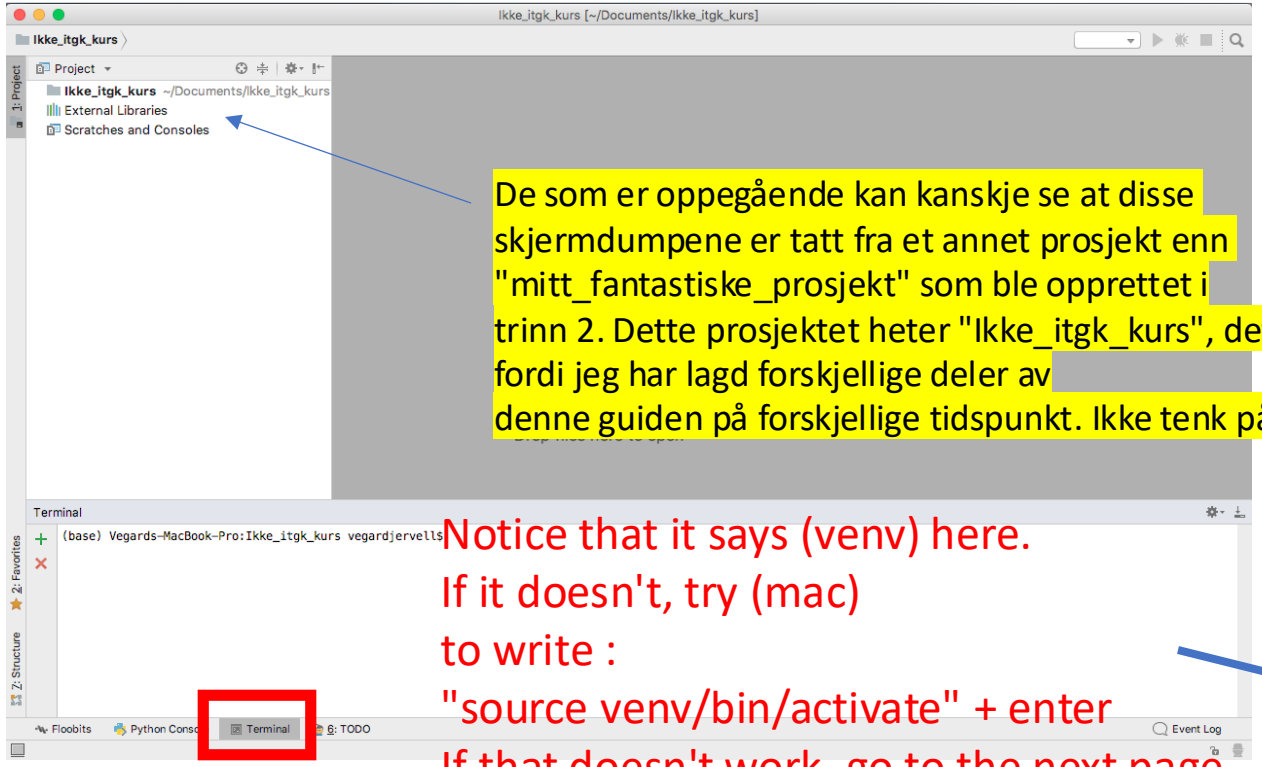
- When installing packages (e.g. NumPy, SciPy, etc.) a copy of the package is installed in the "venv" folder.
- This ensures that your project still works even if you install python4 or NumPy get a reassignment that is not backwards compatible with what you have used in your project.
- In addition, it ensures better control over which packages you have installed for each project and which version of the package you use.
- In short, it can save you quite a bit of trouble

Now we are going to install some packages, customize steps 3 and 4 based on what packages you need in your project.

3a) Open the terminal in PyCharm

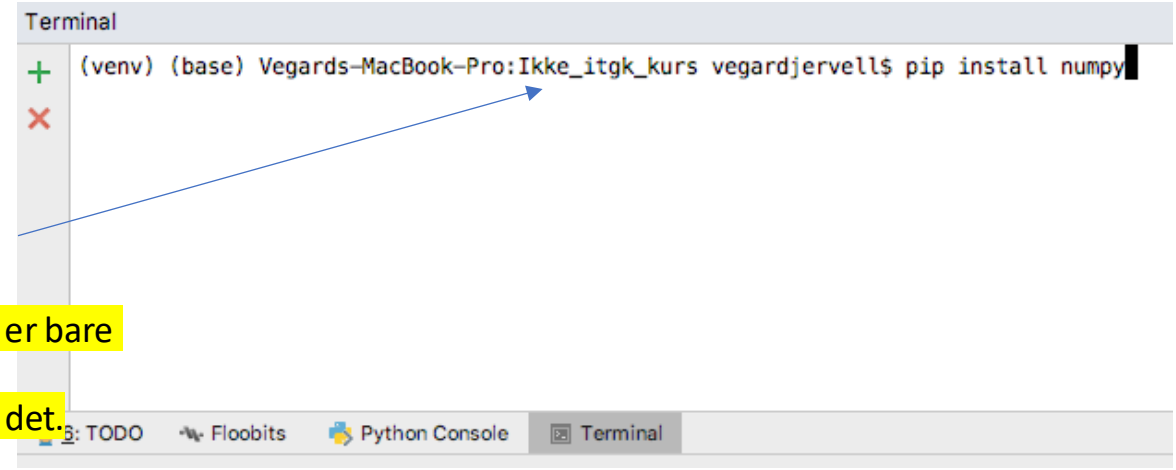


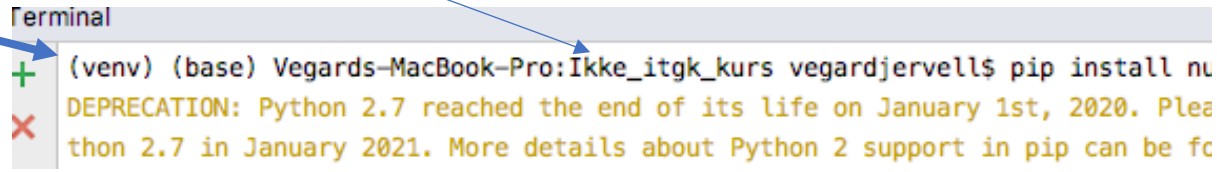
De som er oppegående kan kanskje se at disse skjermdumpene er tatt fra et annet prosjekt enn "mitt_fantastiske_prosjekt" som ble opprettet i trinn 2. Dette prosjektet heter "Ikke_itgk_kurs", det er bare fordi jeg har lagd forskjellige deler av denne guiden på forskjellige tidspunkt. Ikke tenk på det.

Notice that it says (venv) here.
If it doesn't, try (mac)
to write :
"source venv/bin/activate" + enter
If that doesn't work, go to the next page.

3b) pip install numpy + "enter"

If you get a strange error message from pip: Go to step 4 on the next page





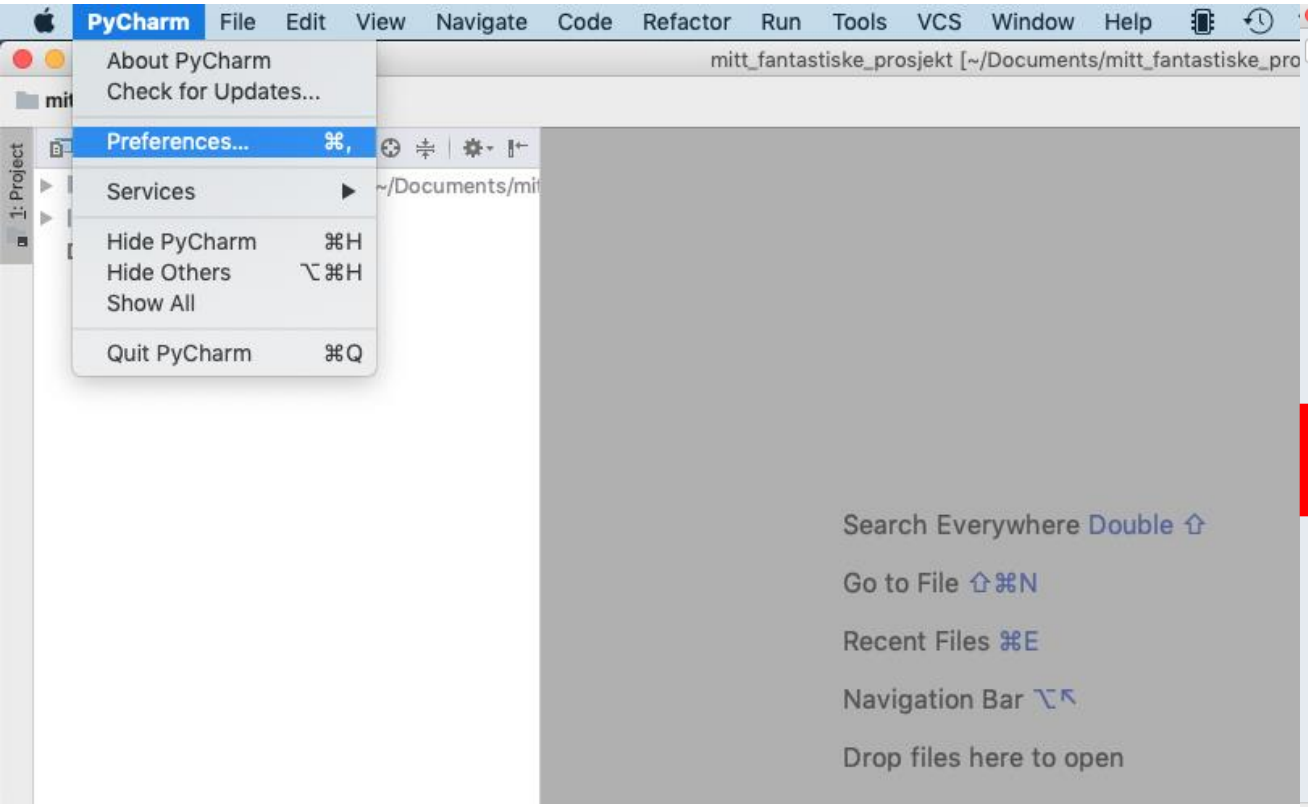
NB: If you get this alert you need to upgrade to python 3

3c) pip install matplotlib
pip install scipy
pip install pandas
...

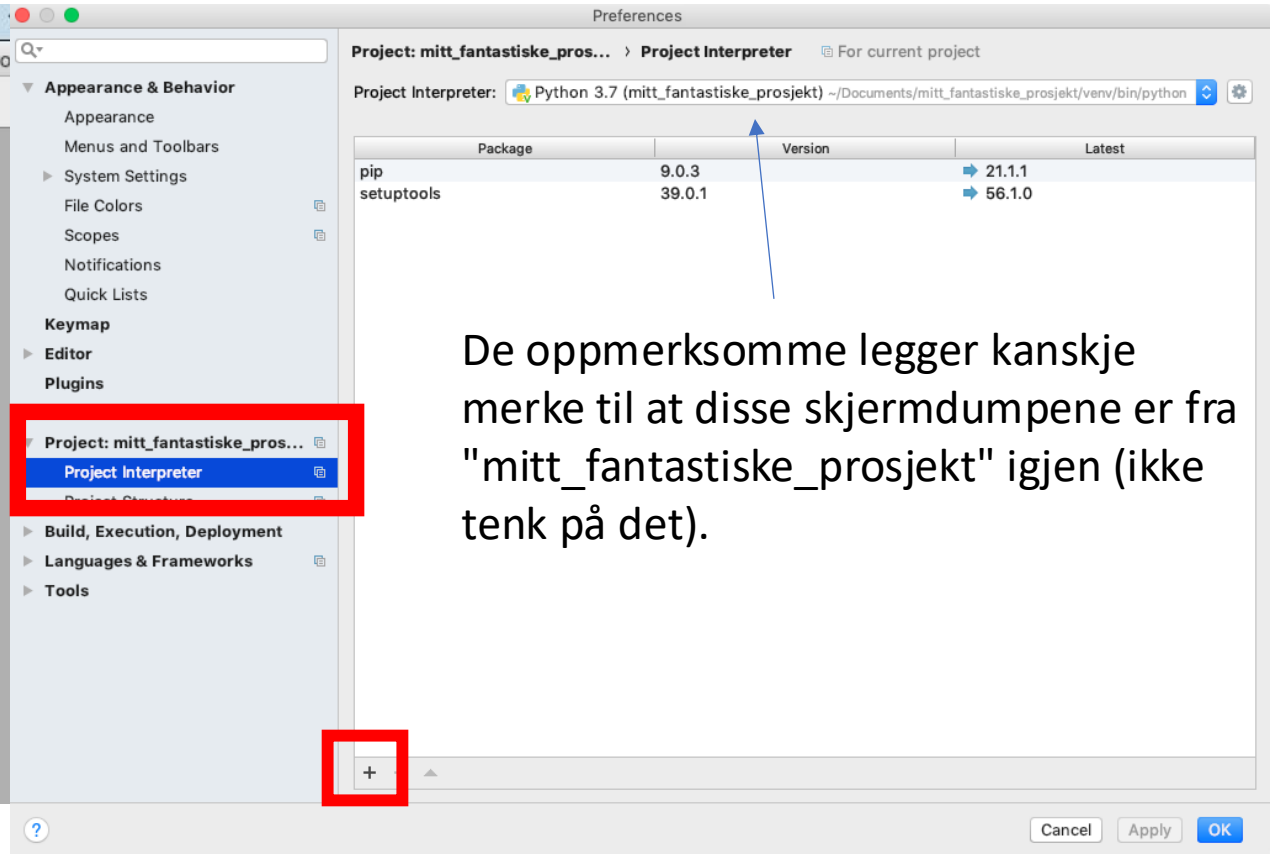
← Customize according to which packages you need

Skip this if step 3 worked

4a) Go to "settings"



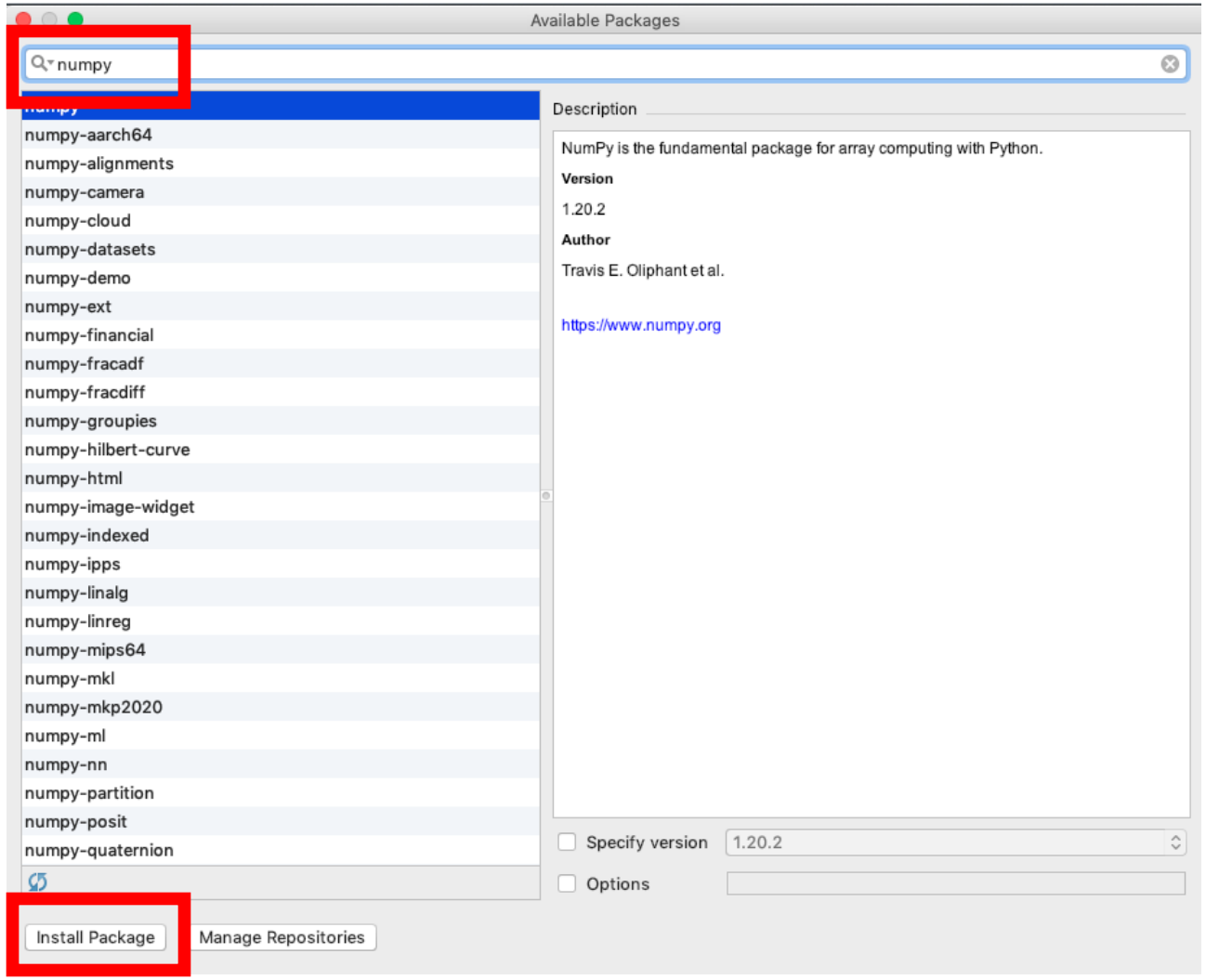
4b) Go to the tab "Project interpreter" and press the "+" button



De oppmerksomme legger kanskje merke til at disse skjermdumpene er fra "mitt_fantastiske_prosjekt" igjen (ikke tenk på det).

Skip this if step 3 worked

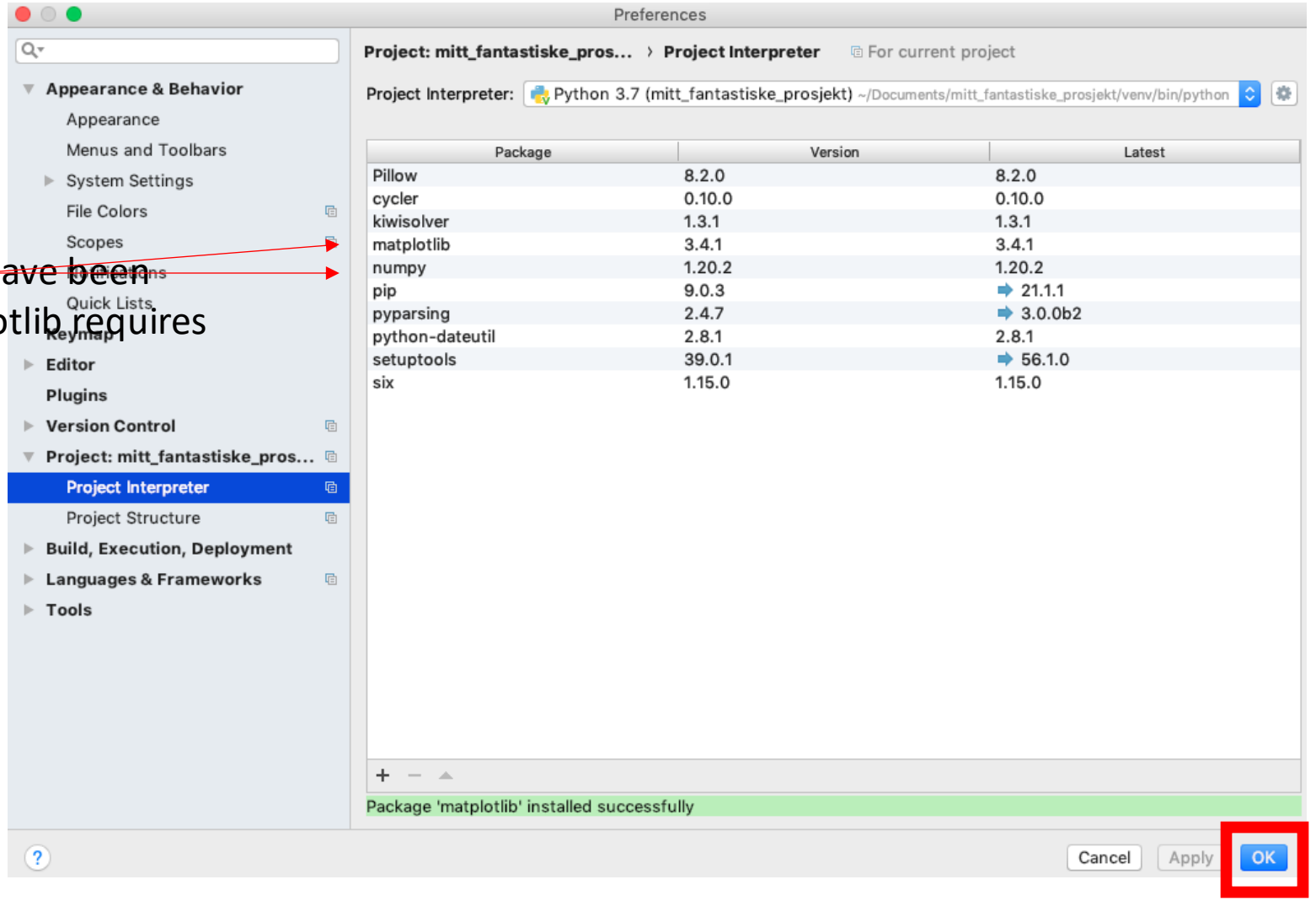
4c) Search for the package you want to install (e.g. "numpy") and press "install package"



4d) Repeat step 4c for the rest of the packages
You will need (matplotlib, scipy, pandas and openpyx
Finally, tick out the window "availible packages"

Skip this if step 3 worked

Now you can see the installed packages here. In this example, I have only installed NumPy and Matplotlib, but as You can see there are several packages that have been Installed. That's because, for example, matplotlib requires some other packages (pillow and cycler) to work, but it handles beep for us

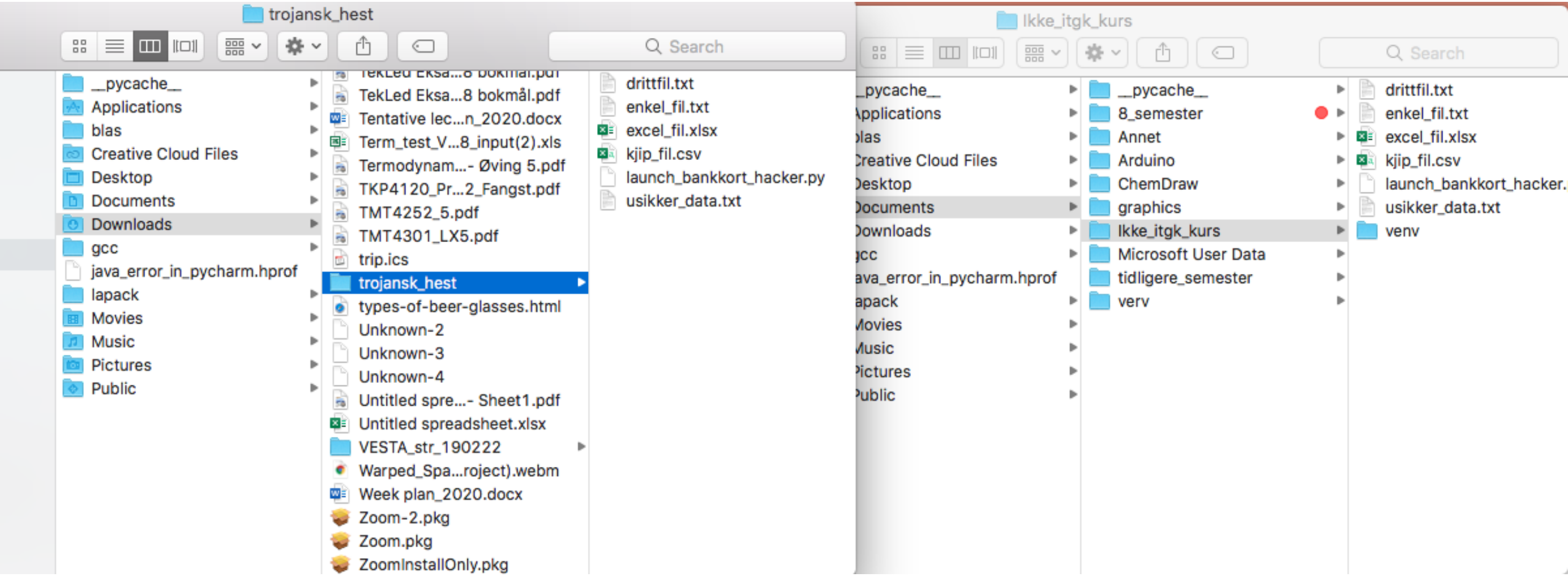


4e) Press "ok"

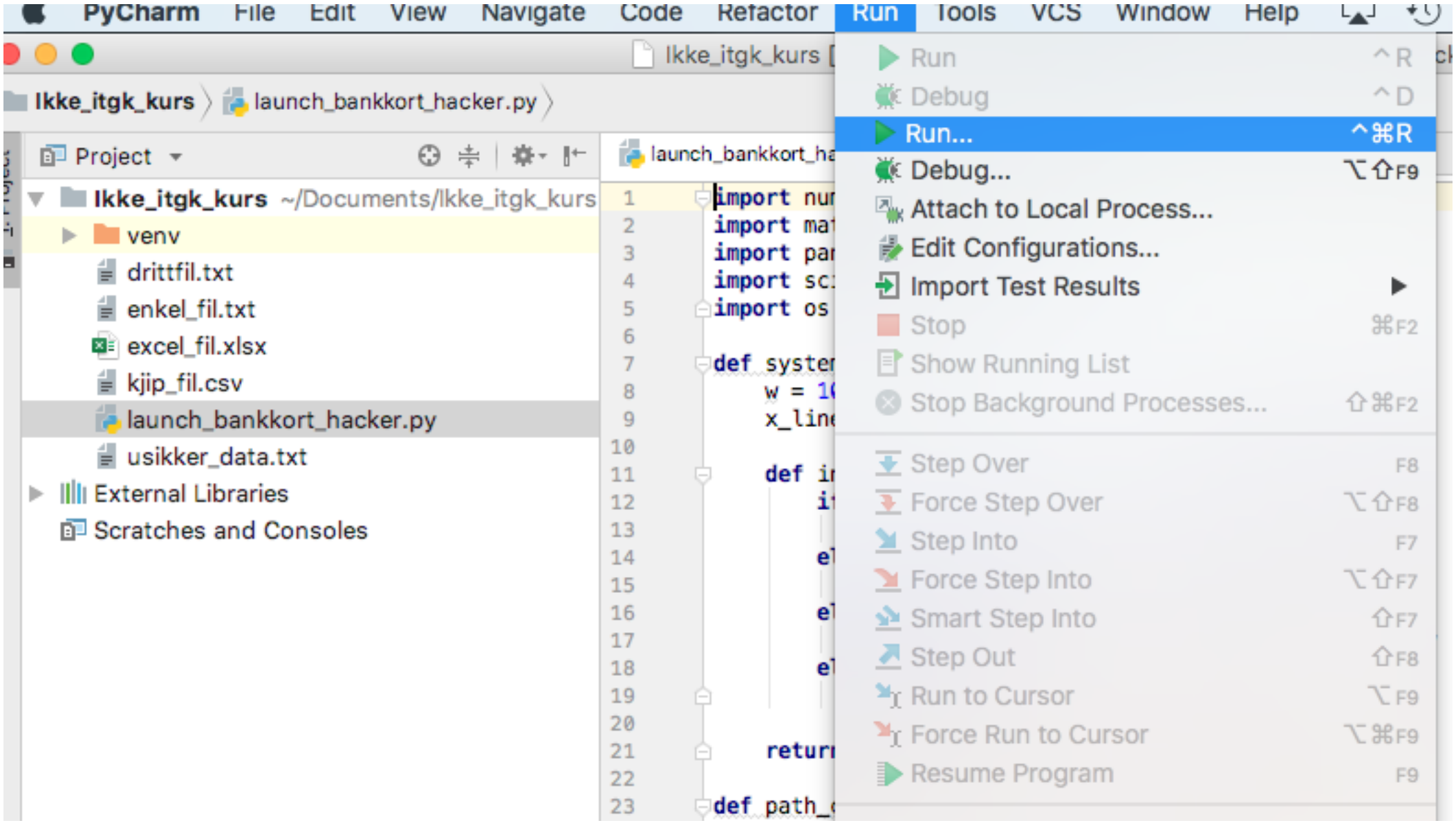
Now we will test that you have installed things correctly and that everything works, this one the test checks that NumPy, Pandas, Openpyxl, SciPy and Matplotlib are installed.
It also checks that you have downloaded the data files associated with the course.

7) Download and open "trojansk_hest.zip", it can be found on http://folk.ntnu.no/vegargje/ikke_itgk/trojansk_hest.zip

6) Move (or copy) the contents of the "trojansk_hest" folder to your project folder



8) Open and run launch_bankkort_hacker.py



9) Follow the on-screen instructions (if any)

10) When you get this picture you are done