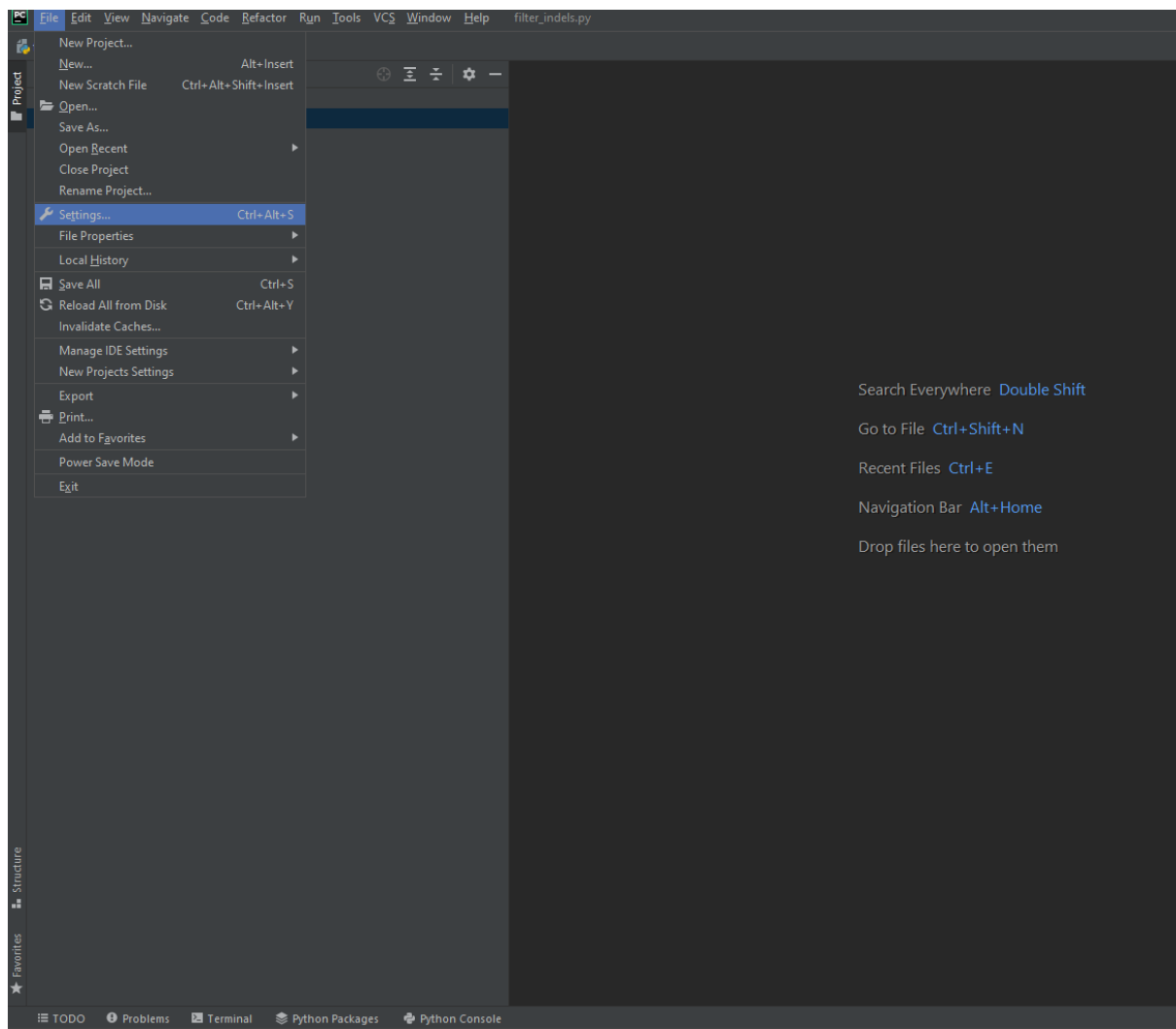


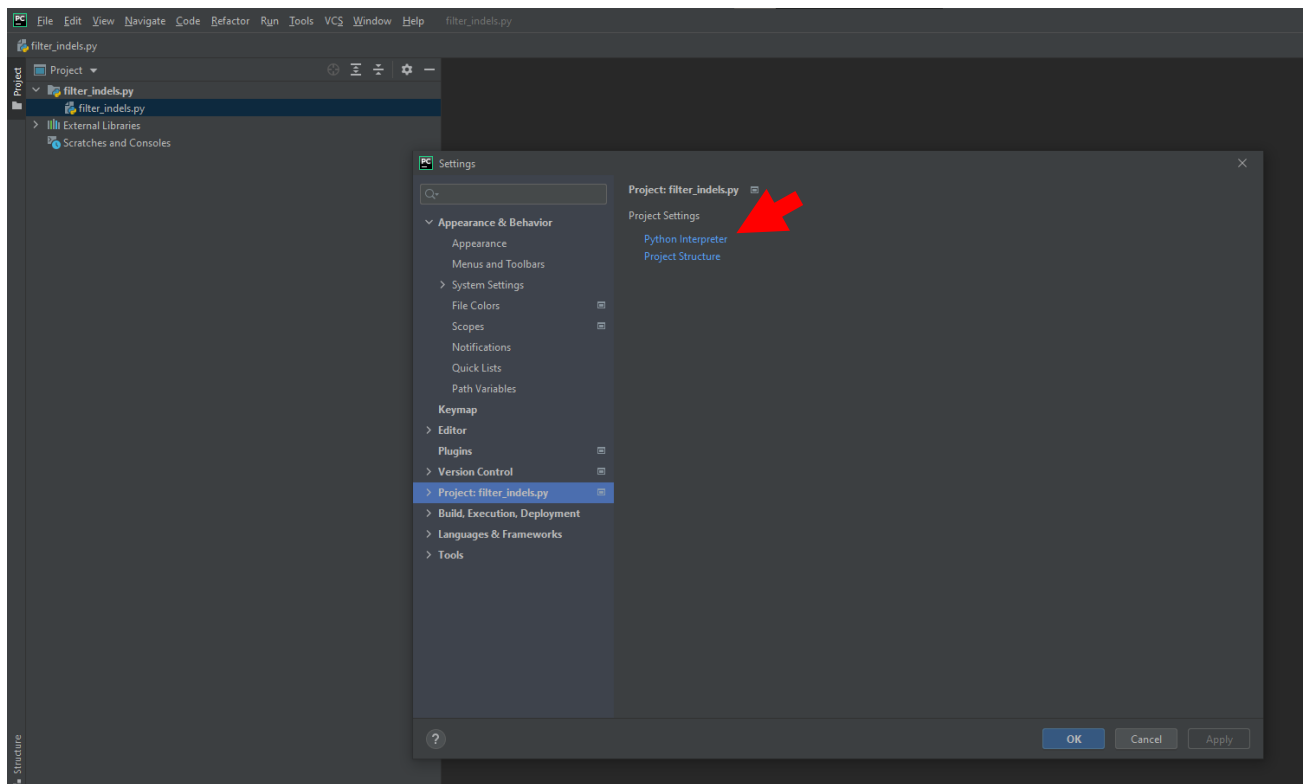
Setting up remote interpreter for Pycharm

We use remote interpreter in order to have our code and pycharm stored locally while still having access to read and write files that are on the server (it is preferable to the option of running the pycharm remotely, we think).

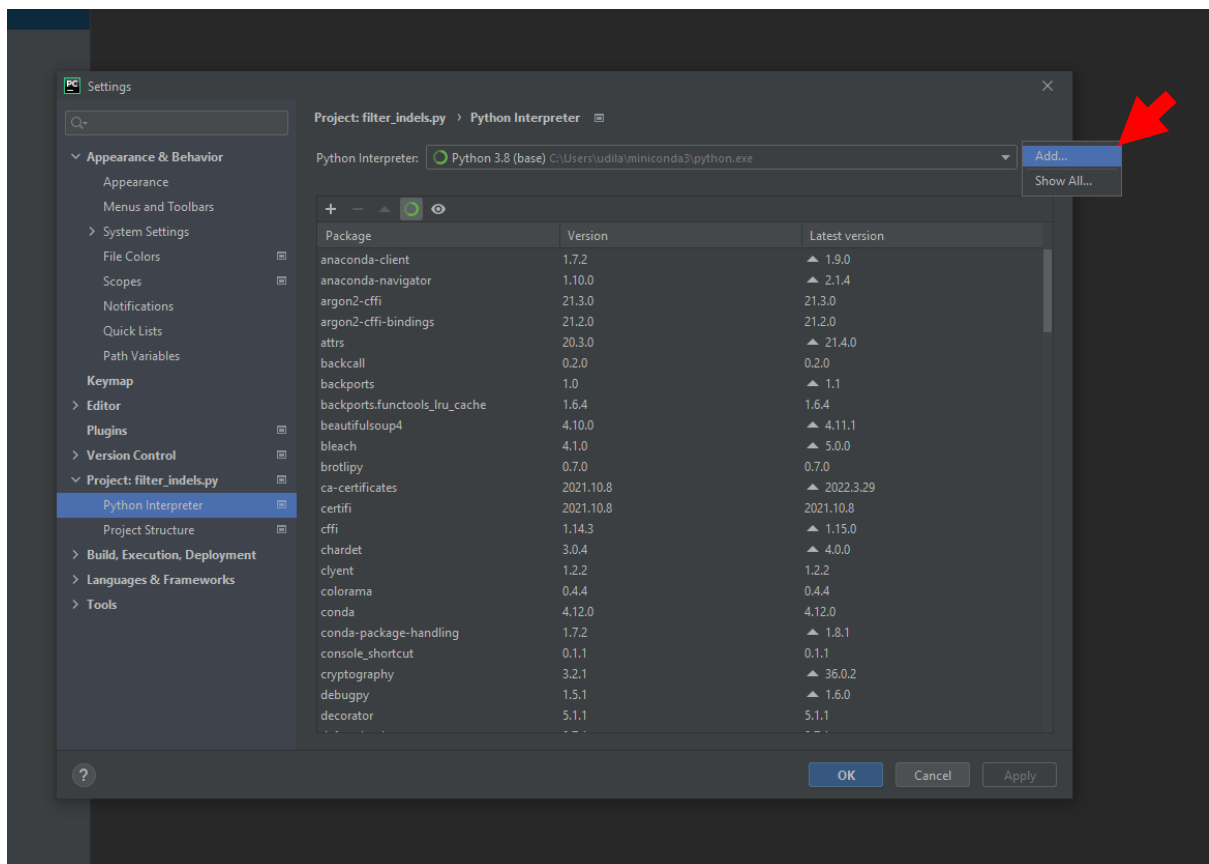
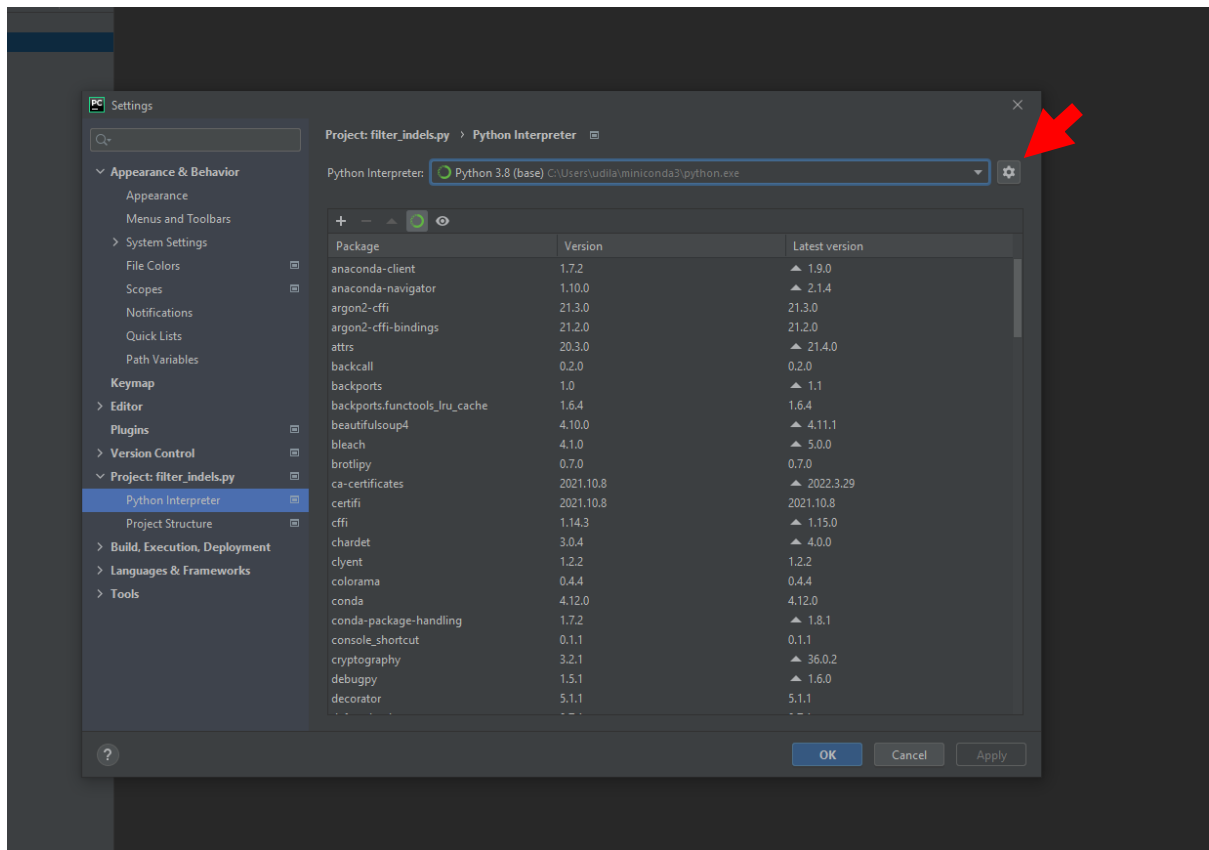
Currently, remote debugging is available on Pycharm professional only, as a [student you can get a free copy](#).

After you have opened your code folder in PyCharm professional you can configure the interpreter. Go to File -> Settings than click on project, as shown bellow (you can also go to the bottom right corner of the main screen and select 'add interpreter').

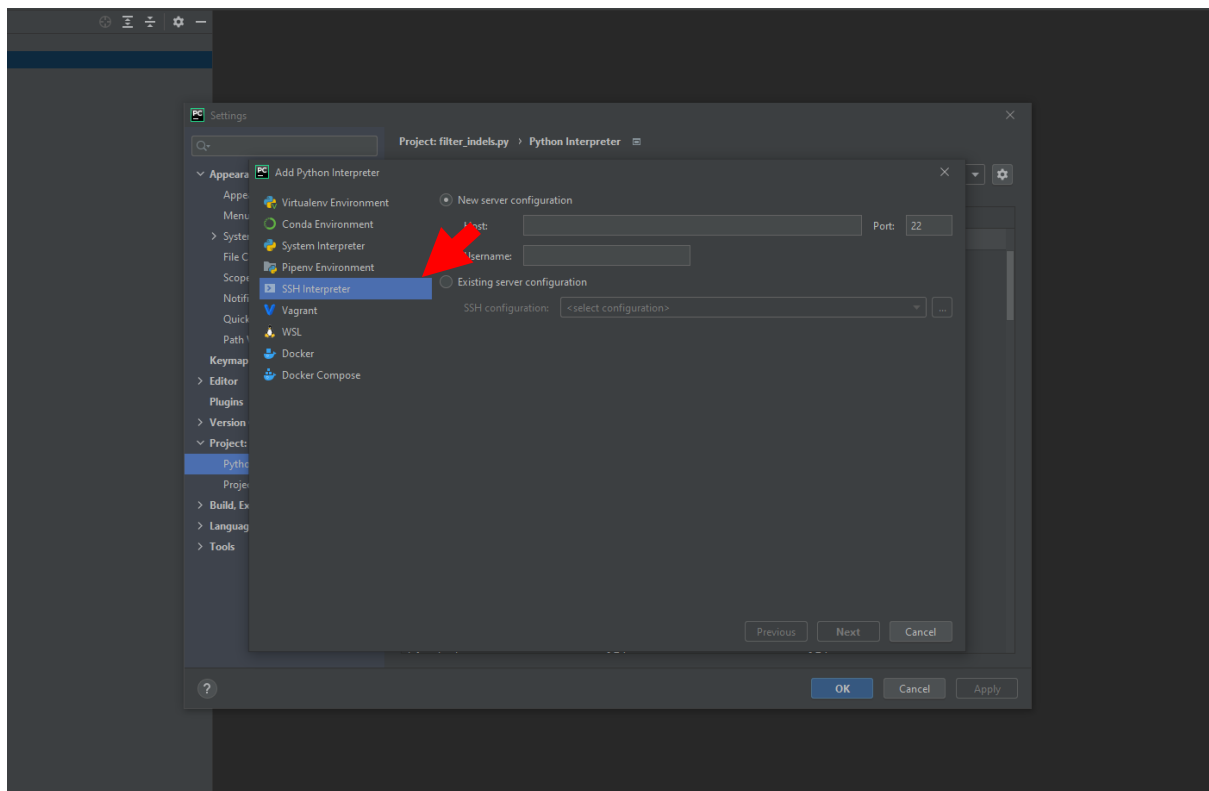




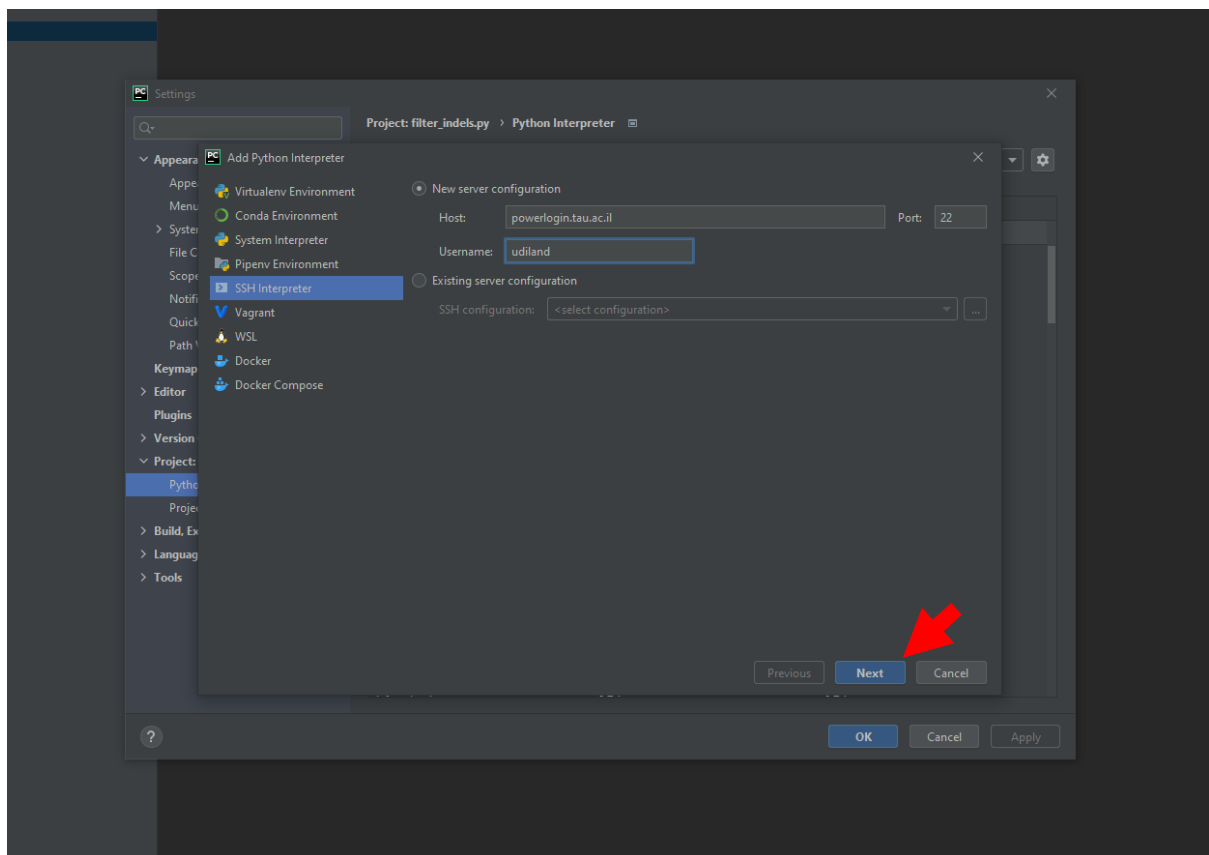
To add new interpreter, click on the toothed wheel icon and 'Add'



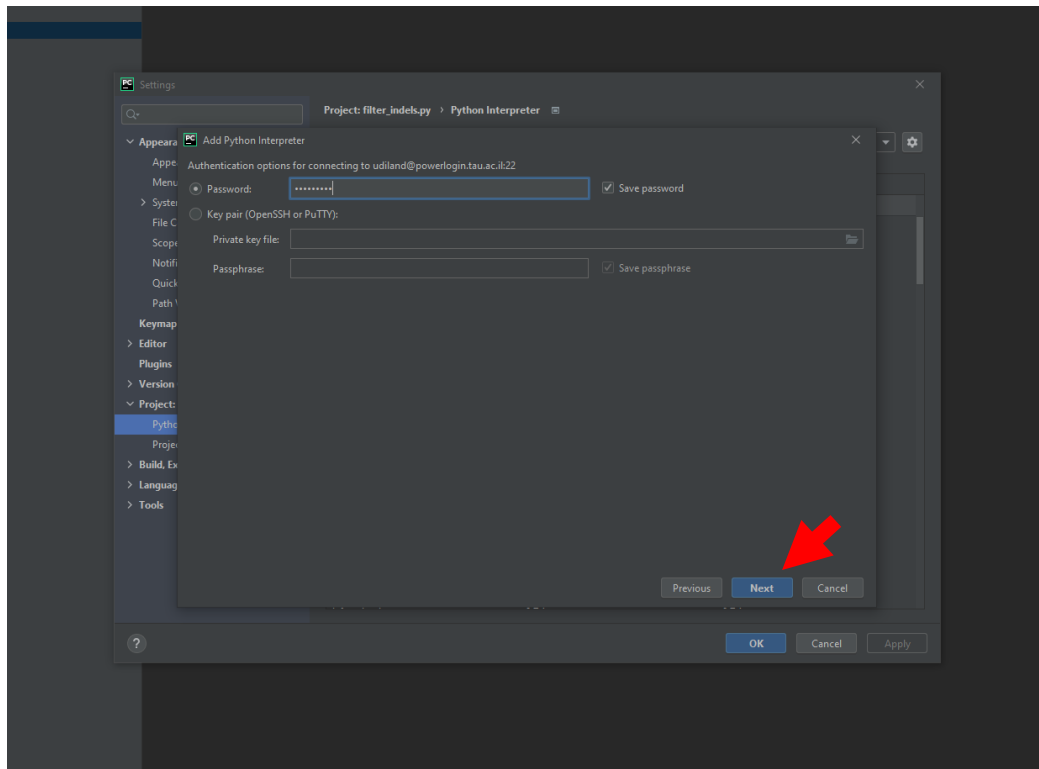
Choose 'SSH Interpreter'



Under 'New server configuration' enter the host address and your username and click 'Next'



Enter your server access password and click 'Next'



In the next window you need to give the path to the python binaries.

It is highly recommended to use conda (more specifically, miniconda) for instructions see Lior's [guide](#) on the lab github.

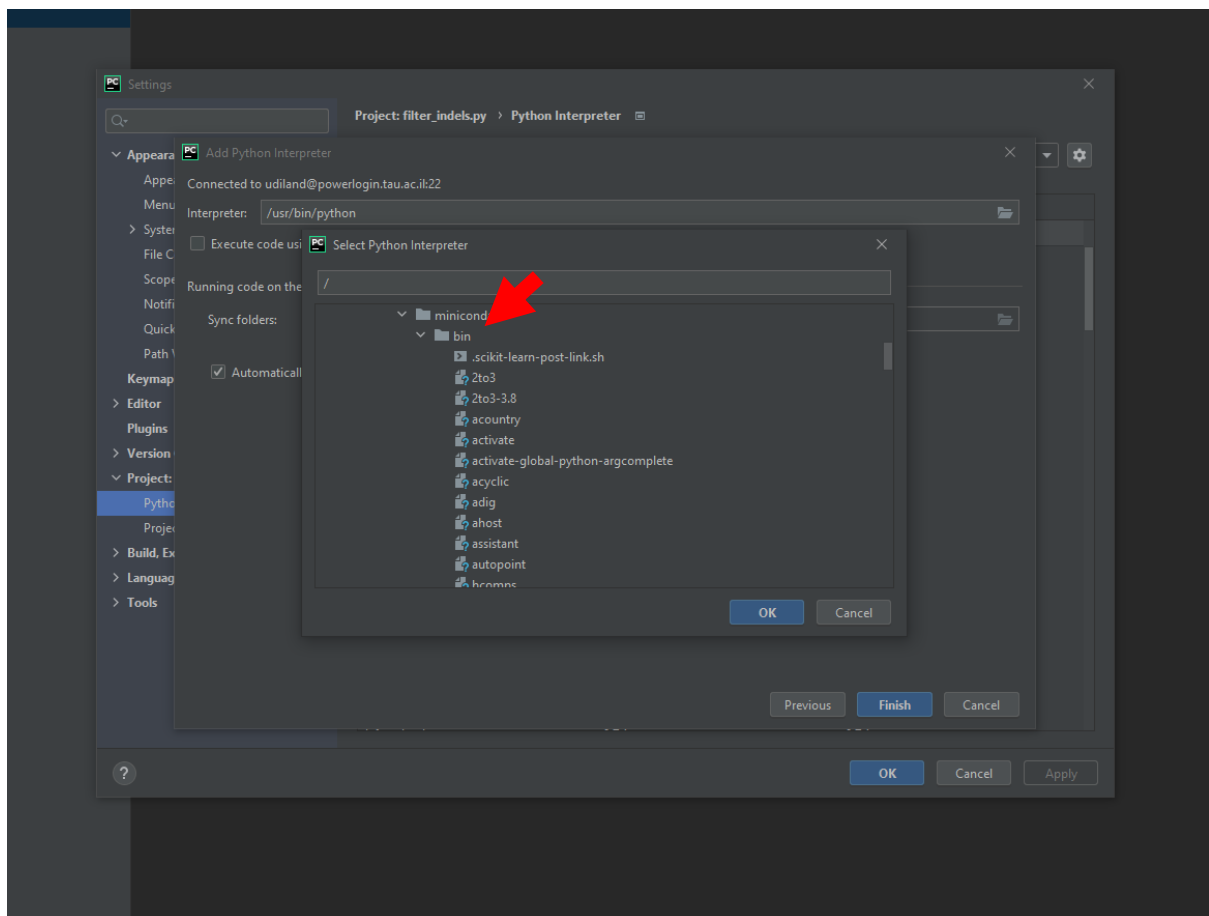
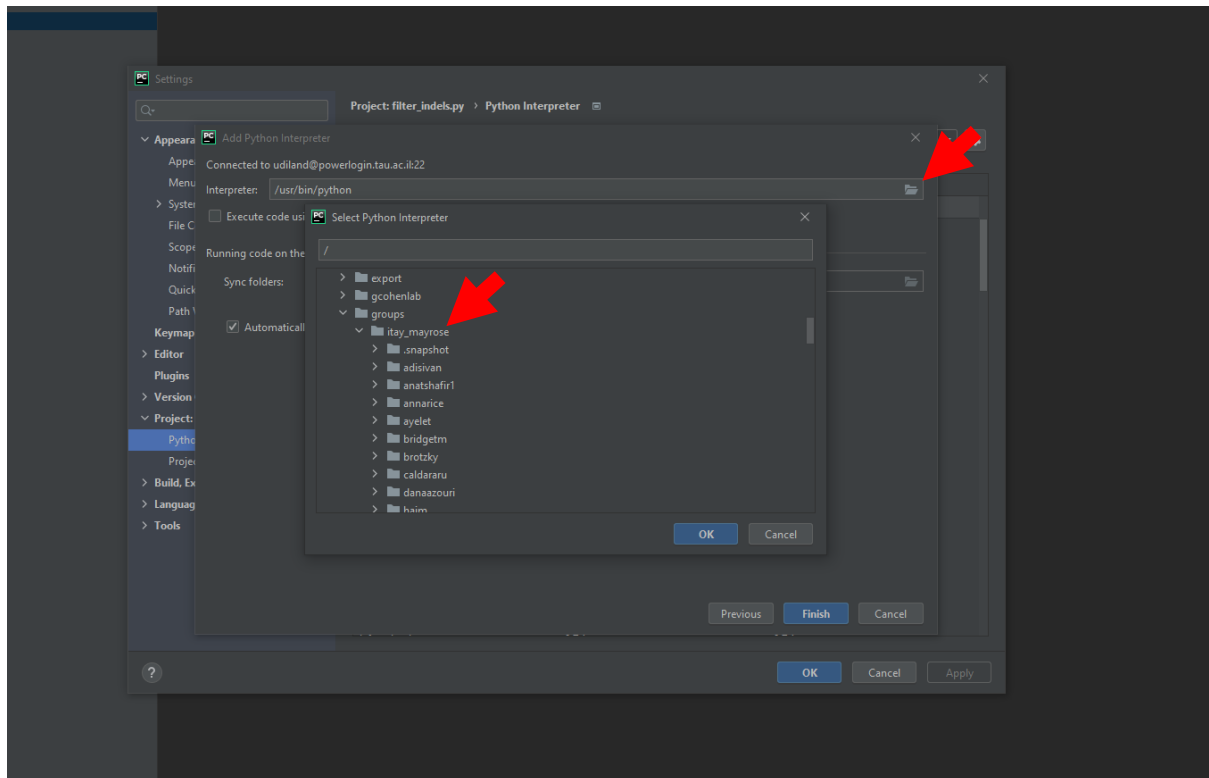
If you want to use the python on your conda base environment (that means that you will have access to packages installed on base environment), click on the folder icon and navigate to your directory (groups -> itay_mayrose -> username) and to the conda/miniconda folder, then to 'bin' and select 'python', see screenshots below.

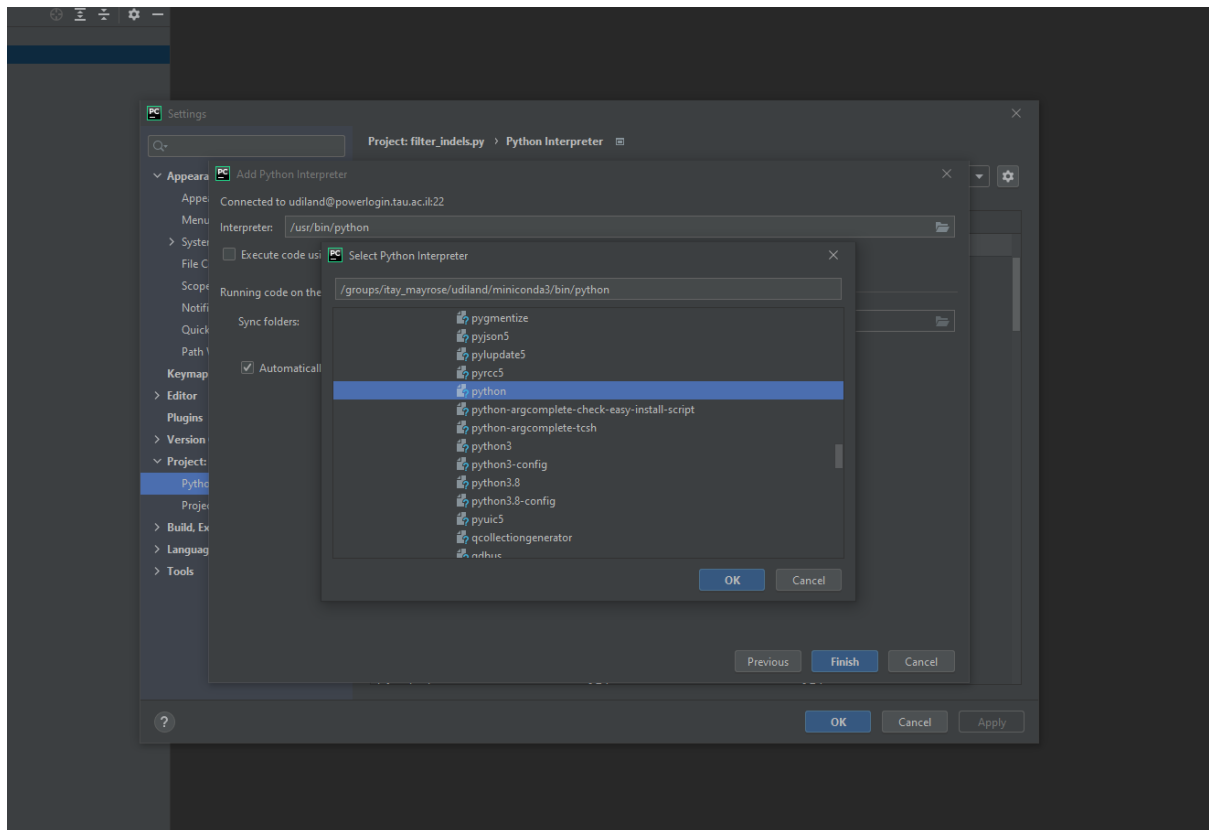
Alternatively, if you want to use a specific environment you can direct to the python executable in that specific environment:

`/groups/itay_mayrose/<username>/miniconda3/envs/<env_name>/bin/python`

- If you do not use conda it is best to use local installation of python and set the interpreter to:
`'/usr/local/bin/python3'`

Path to miniconda 'base' python interpreter:





Another option to use interpreter of a specific environment is to make a text file like so (notice the 'username' and 'name_of_environment'):

```
# !/bin/bash

source "/groups/itay_mayrose/<username>/miniconda3/etc/profile.d/conda.sh" conda activate <name_of_environment>

python "$@"
```

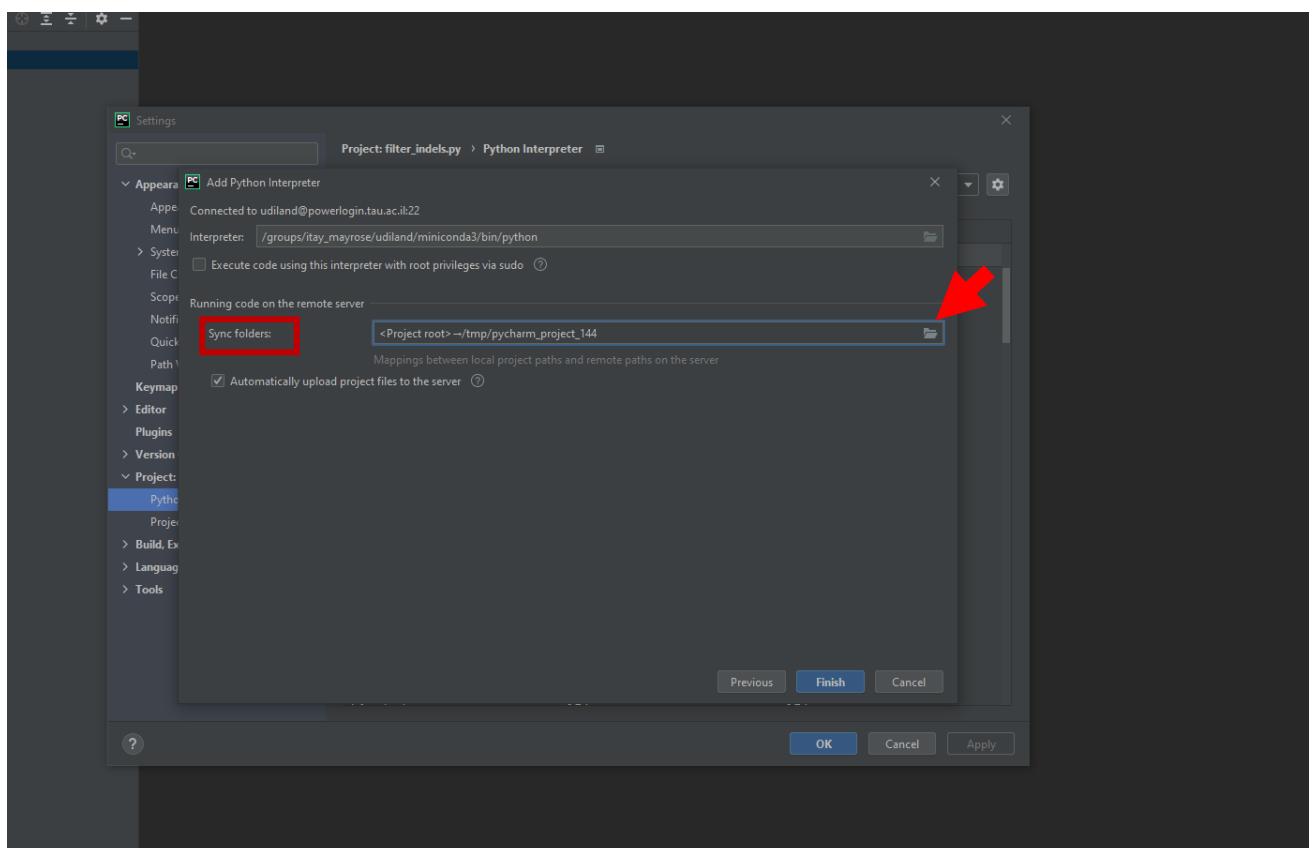
This file needs to be somewhere in your directories on the server.
Then direct the path of the interpreter to this file instead to the python binaries as shown above.

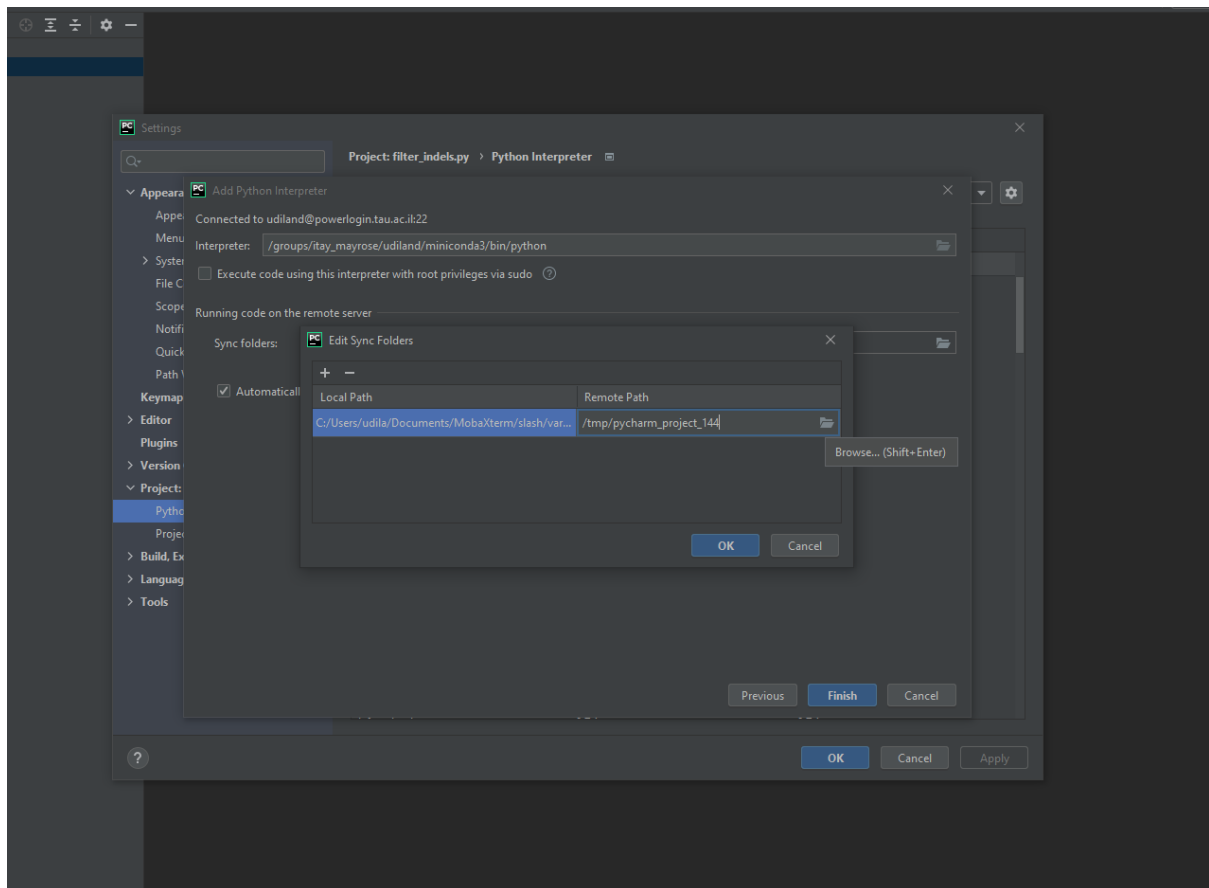
Doing it like so is not really needed except for special cases.

Remember, the code you are working on is on your local machine, so in order for it to be executed on the server pycharm will copy the local code to a remote hidden folder on the server, you can see where it is next to 'Sync Folders:'

Each time you will change your code while working on with pycharm locally It will be sync automatically to the remote folder (this can be a source for some problem when the syncing step is broken, check out 'Deployment' option within pycharm to manually update the remote code folder).

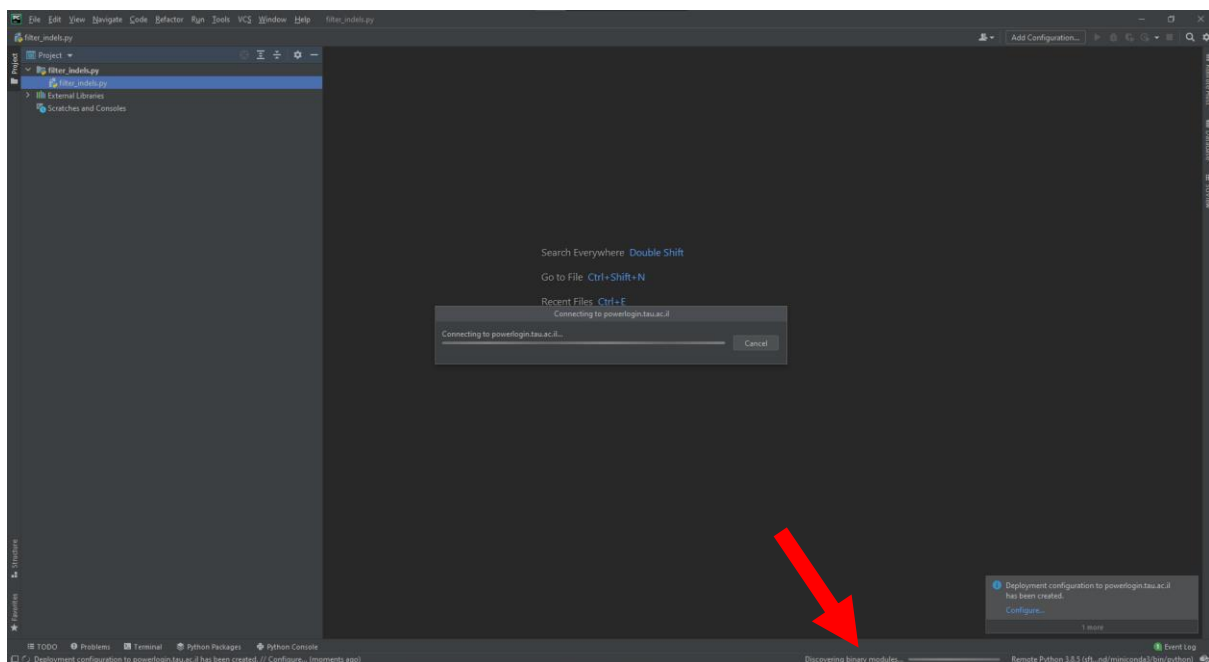
However, some times you want to tell pycharm where on the server to put the remote code (only in special cases, for example if you want to run this code on the cluster with qsub without looking for it in the tmp folder). in order to do that, click on the folder icon and in the pop-up window click on the folder icon to browse your folders on the server, see below. (I don't think it is a good idea to **edit** your code in the remote folder, so don't do it)





To finish the configuration, click 'OK' and 'Finish' where needed.

The program will show you that it is connecting and uploading files, check out the messages on the bottom right and wait for them to finish.



That's It!

You can also use remote interpreter to Docker and WSL, here is a [video](#).