To set up the Xpress python module we will use Anaconda. If you do not have anaconda installed you can download it here https://www.anaconda.com/products/distribution.

The first thing that we are going to do is to create a new environment called Xpress. It is important to know that for the project you might need to use the license hosted on the school of math server and to do this we will need to install Xpress-python v 3.13. Because this is an older version of Xpress-python we will need to make sure that our new environment has python 3.9 installed. Please follow the following instructions.

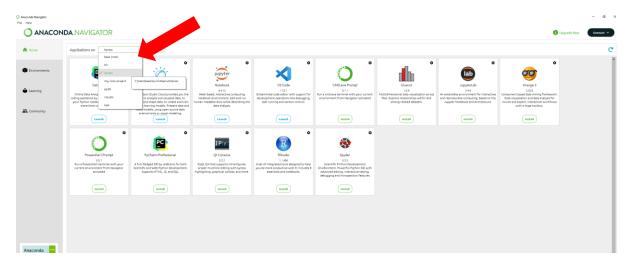
- 1. Open anaconda prompt (for windows) or command on MacOs.
- 2. This will open a terminal. Type the command: conda create -n Xpress python=3.9 and press enter. This will create a new environment called Xpress which will have python 3.9 installed.

```
(base) C:\>conda create -n Xpress python=3.9
Collecting package metadata (current_repodata.json): done
Solving environment: done
```

- 3. The command prompt should then return a list of new packages that will be installed and ask if you want to proceed. Type y and press enter.
- 4. We will now need to activate the new environment that we have just created. Type the command: conda activate Xpress. You should now see that you have changed from the base environment to the new Xpress environment which you have just created.

```
(base) C:\>conda activate Xpress
(Xpress) C:\>
```

- 5. This new environment will be clean and so therefore we will need to install a few of the basic python packages. We will install the numpy, pandas and matplotlib packages by using the following commands:
 - 5.1. conda install numpy
 - 5.2. conda install pandas
 - 5.3. conda install matplotlib
- 6. We are now ready to install Xpress-python, the API that will allow us to solve models using CPLEX. You can do this by using the command: conda install -c fico-xpress xpress==8.13.7
- 7. Xpress-python should now be installed in your environment. Now lets open the Xpress_Python.ipynp file. To do this we will have to open the anaconda navigator. Once you have opened the navigator we will need to activate our Xpress environment.



- 8. You will then need to install Jupyter notebook and whatever IDE you prefer to use. My preference is spyder. You should now be ready to work through the notebook.
- 9. Open the TSP.py folder by clicking on the folder icon on the top right of the screen and navigating to the folder where you saved the document.

Hey everyone, I am almost finished preparing some guides for you on the Xpress python tool. I plan to go through this in the computer lab on Monday but I will make an announcement once this is confirmed.

Before I do this, however, I just want to make sure that my instructions will also work on a mac machine. Is there anyone who has a mac that could T