Setup new machine

Copy and execute the following steps in your terminal.

Install miniconda

First navigate to download folder:

```
cd ~/Downloads
```

Download miniconda with wget (https://docs.conda.io/en/latest/miniconda.html#linux-installers: choose the right version, copy the download link and paste it after the wget command as shown below. The command below downloads the latest version (Date: 27.Oct.2022):

```
wget https://repo.anaconda.com/miniconda/Miniconda3-py39_4.12.0-Linux-x86_64.sh
```

Run the installer:

```
bash Miniconda3-py39_4.12.0-Linux-x86_64.sh
```

Follow the installer instructions: Agree with the licence agreement, leave the default location and **important**: enter "yes" when asked about running conda init.

Remove the installer:

```
rm Miniconda3-py39_4.12.0-Linux-x86_64.sh
```

Important: Logout or close the terminal. To check if the installation was successful, the bash prompt should now have (base) in front of it after logging back in. What it should look like:

```
(base) reub0048@engs-30081:~$
```

Create conda environments

Navigate back to the home directory:

```
cd ~
```

Create an environment (enter "y" when asked):

```
conda create --name pytorch_env python=3.10
```

Activate the newly created environment:

```
conda activate pytorch_env
```

Whenever you want to run something in this environment, make sure that it is activated (the name of the activated environment is shown before your bash prompt, as shown below). The Python packages are installed in the activated environment and are available in this environment.

```
(pytorch_env) reub0048@engs-30081:~$
```

Install most relevant packages using conda

Install **Pytorch** (use cudatoolkit=11.3 because this works with the GPU model and pytorch=1.11 (probably 1.12 works as well), pytorch 1.13 does not support cuda yet):

```
conda install pytorch=1.11 torchvision torchaudio cudatoolkit=11.3 -c
pytorch
```

Check if GPU driver and CUDA is enabled:

```
python3
import torch
torch.cuda.is_available()
exit()
```

This should return True if PyTorch and the cudatoolkit were installed successfully.

Install **Pandas**:

```
conda install pandas
```

Install **Scipy**:

```
conda install scipy
```