

# 0 – Setting up JupyterLab (Conda) on Linux

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Course: Scientific Programming / Wissenschaftliches Programmieren (Python)



<https://www.bccms.uni-bremen.de/people/b-aradi/wissen-progr/python/2023>

# Install Conda (Miniconda) on Linux

- Download the [latest Miniconda installer \(Miniconda3 Linux 64-bit\)](#)
- Start the downloaded Miniconda installer (in a command terminal)

```
cd Downloads  
bash Miniconda3-latest-Linux-x86_64.sh
```

```
Welcome to Miniconda3 py310_23.1.0-1  
  
In order to continue the installation process, please review the license  
agreement.  
Please, press ENTER to continue  
>>>
```

Press ENTER and then repeatedly space till all the license agreement had been shown

```
Do you accept the license terms? [yes|no]  
[no] >>> yes
```

```
Installation finished.  
Do you wish the installer to initialize Miniconda3  
by running conda init? [yes|no]  
[no] >>>
```

Just hit ENTER

# Set up Conda working environment

- Activate conda from a terminal

```
source ~/miniconda3/bin/activate
```

- Update Conda (in case newer version is available)

```
conda update conda
```

```
Anaconda Prompt (miniconda3) - conda update conda
(base) C:\Users\aradi>conda update conda
Collecting package metadata (current_repodata.json): done
Solving environment: -
```

```
The following NEW packages will be INSTALLED:

boltons                pkgs/main/win-64::boltons-23.0.0-py310haa95532_0
jsonpatch              pkgs/main/noarch::jsonpatch-1.32-pyhd3eb1b0_0
jsonpointer            pkgs/main/noarch::jsonpointer-2.1-pyhd3eb1b0_0
packaging              pkgs/main/win-64::packaging-23.0-py310haa95532_0

The following packages will be UPDATED:

conda                  23.1.0-py310haa95532_0 --> 23.3.1-py310haa95532_0
cryptography          38.0.4-py310h21b164f_0 --> 39.0.1-py310haa95532_0
openssl               1.1.1s-h2bbff1b_0 --> 1.1.1t-h2bbff1b_0
pyopenssl             pkgs/main/noarch::pyopenssl-22.0.0-py~ --> pkgs/main/noarch::pyopenssl-23.0.0-py310haa95532_0
requests              2.28.1-py310haa95532_0 --> 2.28.1-py310h21b164f_0
sqlite                3.40.1-h2bbff1b_0 --> 3.41.1-h2bbff1b_0
tqdm                  4.64.1-py310haa95532_0 --> 4.65.0-py310haa95532_0
tzdata                2022g-h04d1e81_0 --> 2023c-h04d1e81_0
urllib3               1.26.14-py310haa95532_0 --> 1.26.15-py310haa95532_0
zstandard             0.18.0-py310h2bbff1b_0 --> 0.19.0-py310haa95532_0

Proceed ([y]/n)? y
```

# Set up Conda working environment

- Create a special environment for all the course related stuff

```
conda create -n scipro
```

```
(base) C:\Users\aradi>conda create -n scipro
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\Users\aradi\miniconda3\envs\scipro

Proceed ([y]/n)? y
```

- Activate the **scipro** environment

```
conda activate scipro
```

- We will install all course related programs into this environment.
- Whenever you open a **new** terminal, where you want to invoke programs from this environment, you must activate this environment.

```
source ~/miniconda3/bin/activate scipro
```

# Set up Conda working environment

- Install JupyterLab (make sure, you are in the scipro environment!)

```
conda install jupyterlab
```

```
(scipro) aradi@scipro:~/Downloads$ conda install jupyterlab  
Collecting package metadata (current_repodata.json): \ █
```

Name of the active environment

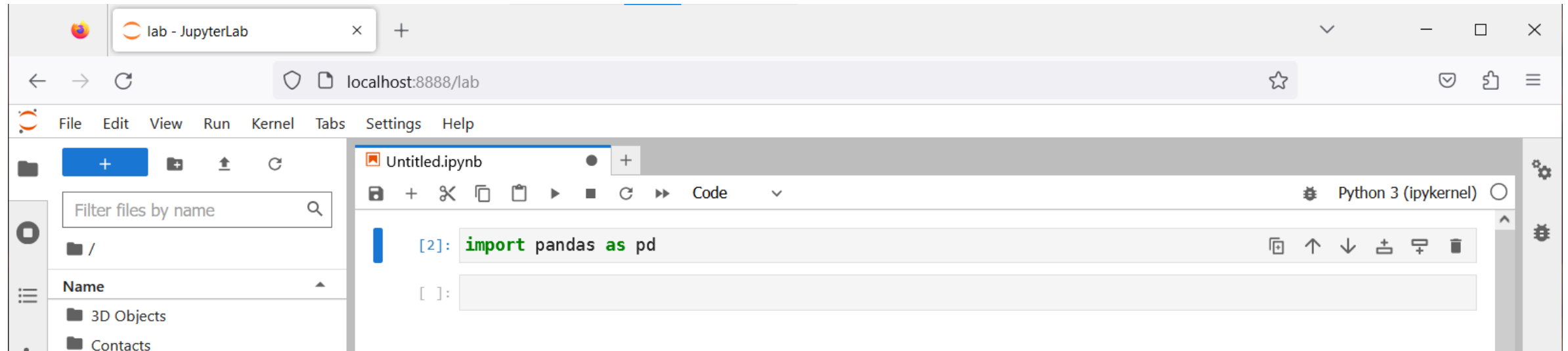
# Start JupyterLab

- Start JupyterLab

```
jupyter-lab
```

```
(scipro) C:\Users\aradi>jupyter-lab  
[I 2023-04-10 17:41:08.939 ServerApp] jupyterlab | extension was successfully linked.  
[I 2023-04-10 17:41:08.955 ServerApp] nbclassic | extension was successfully linked.
```

- This should start a browser with JupyterLab



**You are ready to use JupyterLab and create Python programs!**

**Have fun!**