

```
# -----
# rent a VPS on the internet, e.g.
# contabo.de for Euro 3.99 per month
# - VPS server has preconfigured Ubuntu 20.04
# - VPS server has IP 168.87.126.200 (example)
# - and a 'root' account (with password)
#
# Note:
# $ at the beginning of a line designates a command line
# # at the beginning of a line designates a comment line
# yellow background: content in file
```

```
# -----
# edit hosts file
$ sudo nano /private/etc/hosts
Password:
# add the following line
168.87.126.200 connectweb.ch
^Xy
```

```
# -----
# login as root and add user
$ ssh root@connectweb.ch
Password:
```

```
# add user mart
$ adduser mart
# answer with enter (accept defaults) and set password
```

```
# update visudo
$ visudo
# go to last line and add
mart ALL=(ALL) NOPASSWD: ALL
^Xy
```

```
# logout
$ logout
```

```
# -----
# enable ssh for user mart
$ ssh-copy-id -i ~/.ssh/id_rsa mart@connectweb.ch
Password:
```

```
# test ssh login
$ ssh mart@connectweb.ch
# logs in without asking for password!
```

```
# -----
# disable password login etc.
$ sudo nano /etc/ssh/sshd_config
# change (activate) the following lines
UsePAM no
PermitRootLogin no
PasswordAuthentication no
^Xy
```



```
# -----
# install unattended updates
$ sudo apt install unattended-upgrades

# do not change config file (use defaults)
# sudo nano /etc/apt/apt.conf.d/50unattended-upgrades

# enable Automatic Upgrades
$ sudo nano /etc/apt/apt.conf.d/20auto-upgrades
# add the following lines to empty file
APT::Periodic::Update-Package-Lists "1";
APT::Periodic::Unattended-Upgrade "1";
APT::Periodic::AutocleanInterval "7";
^X

# make first Automatic Upgrade
$ sudo unattended-upgrades -d

# -----
# login to VPS server again
$ ssh mart@connectweb.ch
...

# -----
# check Python version
$ python3 -V
Python 3.8.5

# -----
# install Python pip
$ sudo apt update
...
$ sudo apt install python3-pip
...
$ pip3 --version
pip 20.0.2 from /usr/lib/python3/dist-packages/pip (python 3.8)

# -----
# install dependencies

$ sudo pip3 install setuptools
Requirement already satisfied: setuptools in /usr/lib/python3/dist-packages (45.2.0)

$ sudo pip3 install selenium
... selenium-3.141.0

$ sudo pip3 install phantomjs
... phantomjs-1.3.0

$ sudo pip3 install schedule
... schedule-0.6.0

$ sudo pip3 install matplotlib
... matplotlib-3.3.3
```

```
# -----
# install firefox
$ sudo apt-get update
...
$ sudo apt-get install firefox
...
$ firefox -V
Mozilla Firefox 84.0

# -----
# install geckodriver (latest version in https://github.com/mozilla/geckodriver/releases/)
$ wget https://github.com/mozilla/geckodriver/releases/download/v0.28.0/geckodriver-
v0.28.0-linux64.tar.gz
...
$ ls
geckodriver-v0.28.0-linux64.tar.gz
$ tar -xvzf geckodriver-v0.28.0-linux64.tar.gz
geckodriver
$ sudo chmod +x geckodriver
$ sudo mv geckodriver /usr/local/bin/

# -----
# test firefox, geckodriver with selenium
$ nano test.py
# copy & paste contents of connect-web-logger/server/test.py to here
^Xy
$ python3 test.py
Test selenium & firefox...
Title: Welcome to Python.org

# -----
# install git
$ sudo apt install git
...
$ git --version
git version 2.25.1

# -----
# install SQLite
$ sudo apt install sqlite3
...
$ sqlite3 --version
3.31.1 2020-01-27 19:55:54 3bfa9cc97da10598521b342961df8f5f68c7388fa117345...
```

```
# -----
# install project connect-web-logger
$ git clone https://github.com/majo48/connect-web-logger.git
...
$ cd connect-web-logger
$ mkdir database

$ cd logger
$ nano local_settings.py
# copy & paste contents of connect-web-logger/logger/local_settings.py in your mac to here
# or copy contents from local_settings.py.dist and update the username and password
^Xy
$ cd ..

# -----
# run connect-web logger
$ pwd
/User/mart/connect-web-logger
$ python3 -m logger
2020-12-29 14:13:45 >>> logging in to url: https://connect-web.froeling.com/#!/login
2020-12-29 14:13:59 >>> successfull login
2020-12-29 14:13:59 >>> system info
2020-12-29 14:14:03 >>> boiler info
2020-12-29 14:14:06 >>> heating circuit 01 info
2020-12-29 14:14:09 >>> DHW tank 01 info
2020-12-29 14:14:13 >>> feed system info
2020-12-29 14:14:16 >>> logout
etc.

# -----
# end of installation on Ubuntu server
# stop running process with Ctrl+C
^C
...
$ logout
# end of ssh session
$ ...
```