Using Pipfile and Dockerfile

For the dependence management of the project, the `pipenv` packaging tool is used. It will allow users of this repository to get exact versions of the packages that are used while developing it.

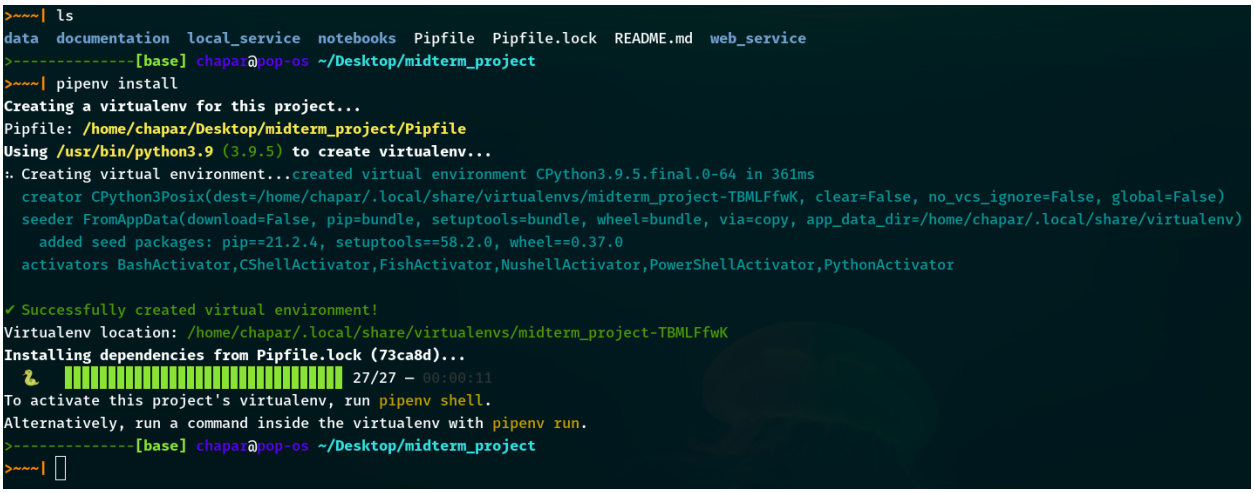
In order to install `pipenv`, type the line below to your terminal:

```
pip install pipenv
```

Once installing completed, move to the project folder. Since the Pipfile and Pipfile.lock files are under main folder, just type:

```
pipenv install
```

This command will create a virtual environment that is defined by Pipfile and Pipfile.lock files. Installation takes few seconds and you will get such a screen:



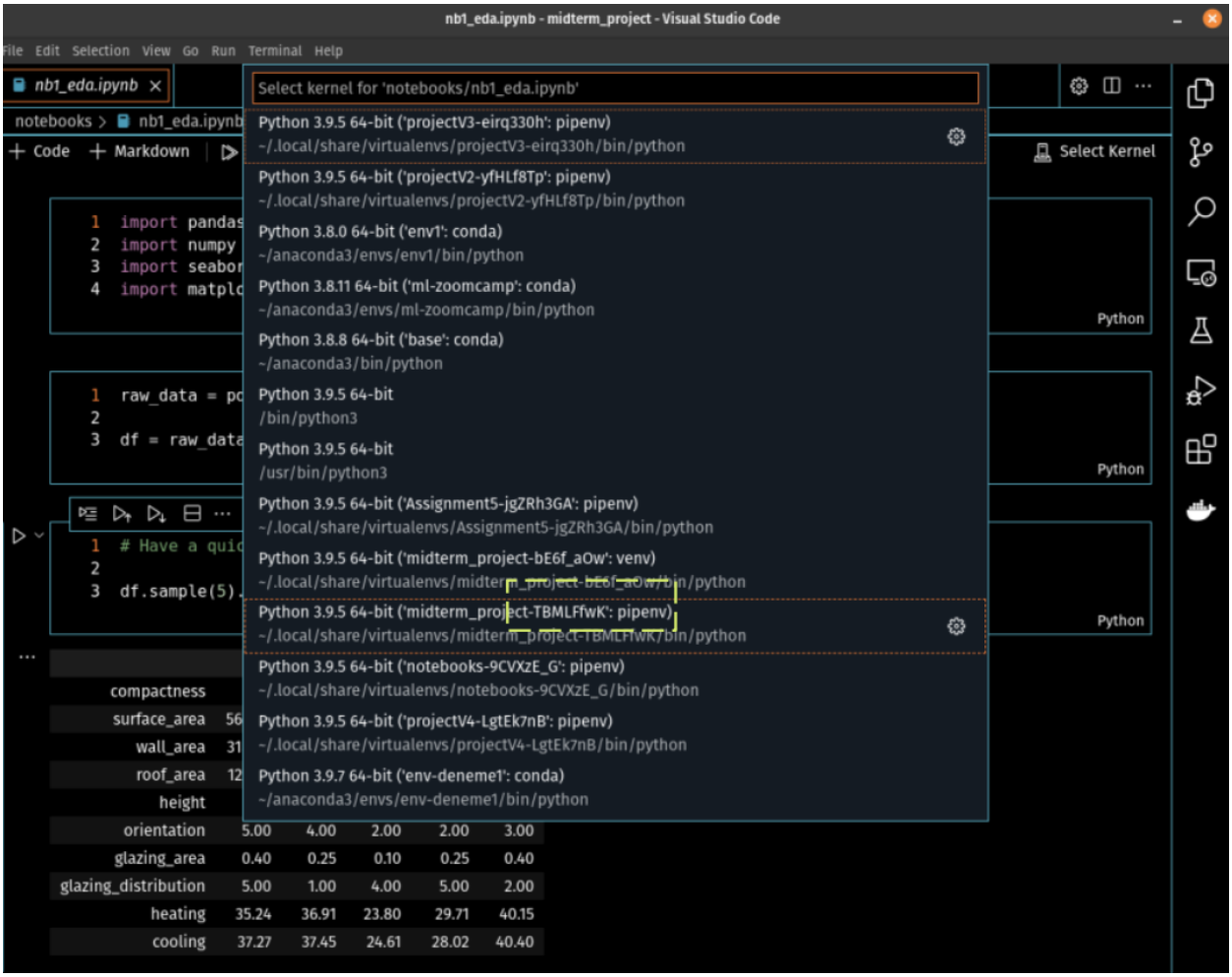
As the command line instructions mention, next step is to activate this virtual environment by typing:

```
pipenv shell
```

This yields such an output:

```
>--------------[base] chapar@pop-os ~/Desktop/midterm_project
>~~~| pipenv shell
Launching subshell in virtual environment...
 . /home/chapar/.local/share/virtualenvs/midterm_project-TBMLFfwK/bin/activate
>--------------[base] chapar@pop-os ~/Desktop/midterm_project
>~~~|  . /home/chapar/.local/share/virtualenvs/midterm_project-TBMLFfwK/bin/activate
>--------------[base] chapar@pop-os ~/Desktop/midterm_project
>~~~|
```

Notice the identifier shown with rectangle. In your code editor, you will pick it. As an example, in VS Code, select the kernel with this identifier:



Note that you may need to restart your editor to see in in the list.

In order to use the Dockerfile, a similar procedure is needed: building (like `pipenv install`) and running (like `pipenv shell`). In order to activate the docker image, move to the `local_service` folder (under the main folder) in command line and type:

```
docker build -t give_name .
```

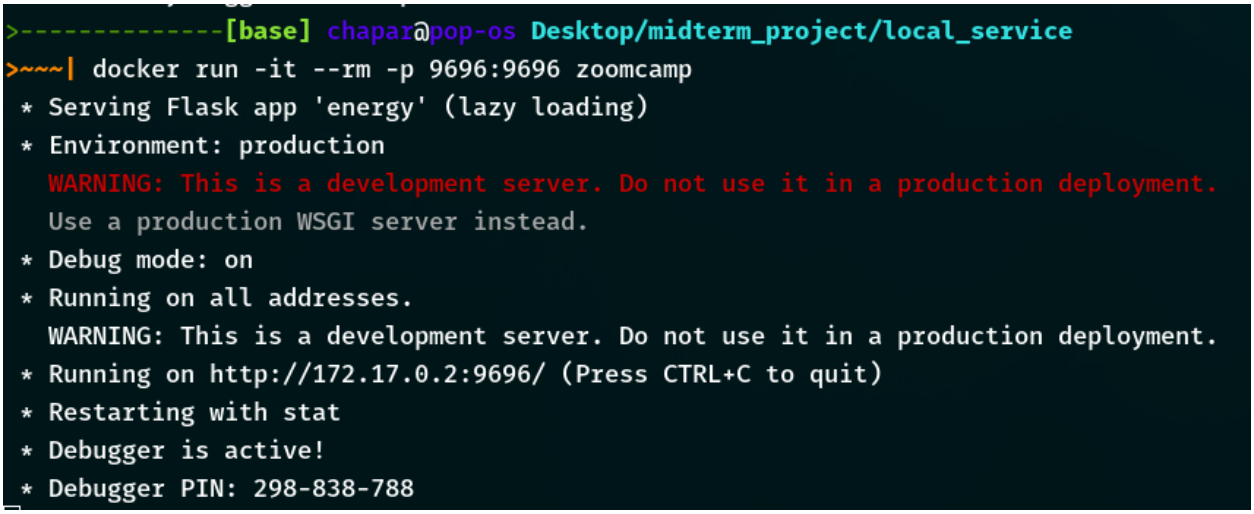
You can put any name instead of `give_name` term.

In case experiencing authorization problems due to your own Docker installation, this may help:

```
sudo chown $(whoami):$(whoami) /var/run/docker.sock
```

When building it successfully (would take few minutes), type the code below to activate (pay attention to use same name given in previous step):

```
docker run -it --rm -p 9696:9696 give_name
```



The screen shows that the prediction service is up and running locally.

In order to use the service, follow the instructions in *Using_service_in_local.pdf* file.

Note that the local_service folder contains the same Pipfile and Pipfile.lock files. It is intended to keep this folder independent. In case the folder is moved out of the main folder, Dockerfile still will be able to reach those and run service.