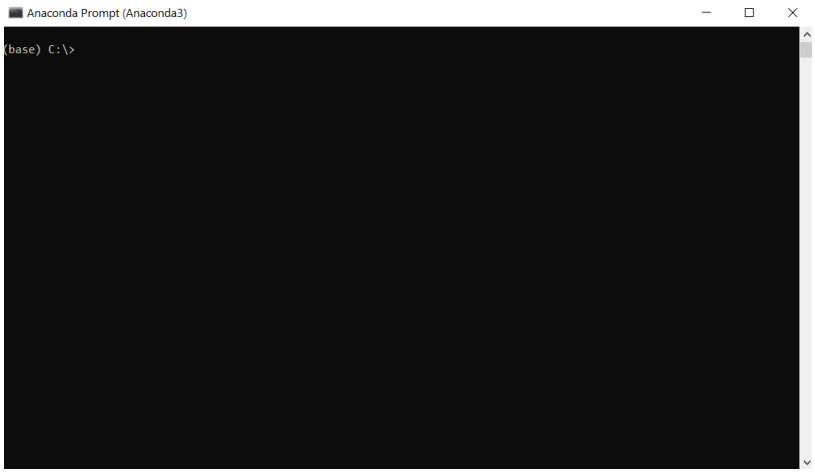
Working with WaterTAP3 using Jupyter and Conda

1. **Install `Anaconda`**
   Follow the instruction: https://docs.anaconda.com/anaconda/install/
   If successful, `Python`, `pip` and `Jupyter Notebooks` are automatically installed
2. **Open `Anaconda Prompt`, use `cd` to navigate to your directory**

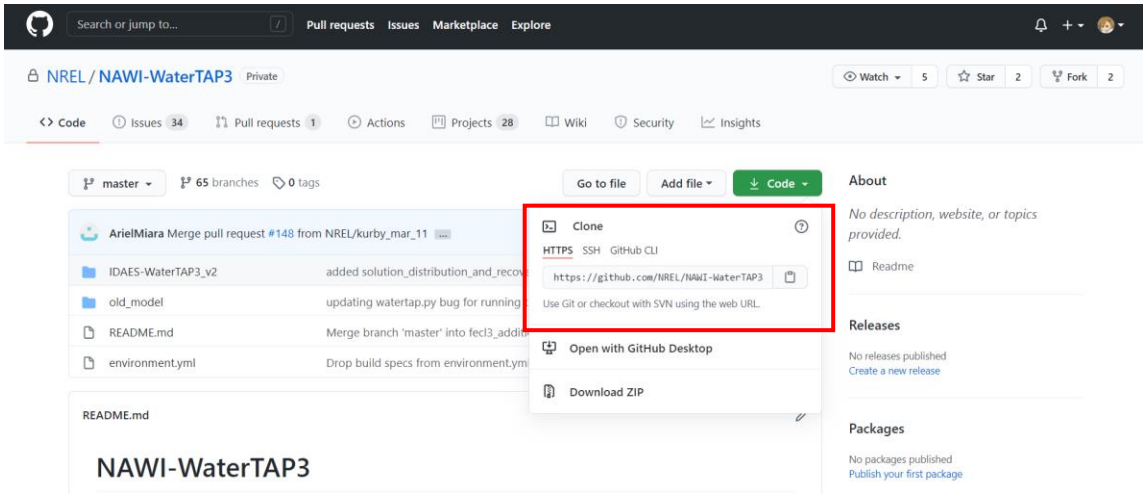


   `Base` is the default environment that we are working on

3. **Clone `watertap3` repository to local machine using `Git`**

   Install `Git`

   ```
   $ pip install git
   ```



   Then clone this remote repository to local machine using `Git`

   ```
   $ git clone https://github.com/NREL/NAWI-WaterTAP3.git
   ```

   If successful, there will be a folder called `NAWI-WaterTAP3` in your directory

4. **Create an `WaterTAP3` environment from the given file `environment.yml`**

```
$ conda env create --file environment.yml
```

If successful, there will be a new environment called `watertap3` when you type

```
$ conda env list
```

```
base                  *  C:\Users\awang\Anaconda3
musa620                  C:\Users\awang\Anaconda3\envs\musa620
watertap3                C:\Users\awang\Anaconda3\envs\watertap3
```

Environments must first be activated before packages are available to use

```
$ conda activate watertap3
```

If the development team update the `environment.yml` in the future

```
$ conda env update --file environment.yml
```

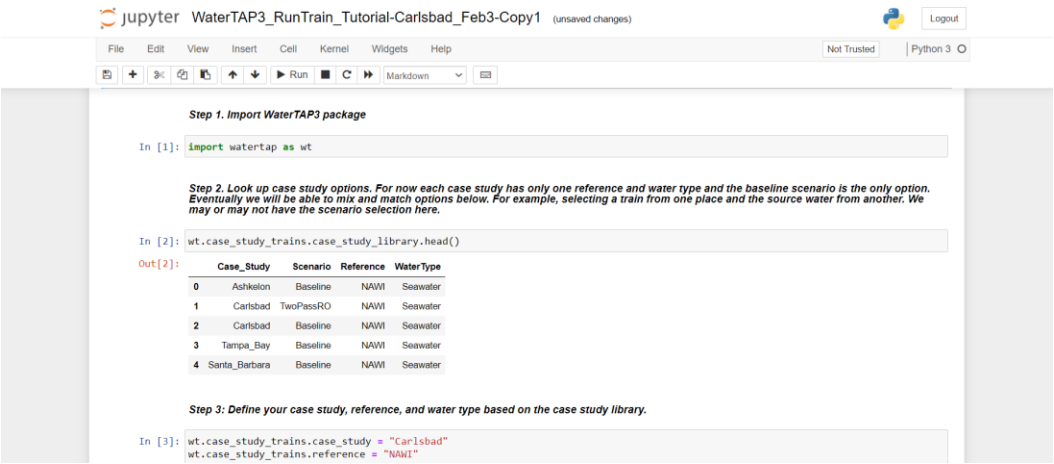
To delete this environment

```
$ conda remove --name watertap3 --all
```

5. **Open `Jupyter Notebook dashboard`**

```
$ jupyter notebook
```

6. **Open the desired `.ipynb` notebook and execute cells**



Useful Links

1. Anaconda: https://docs.anaconda.com/anaconda/
2. Jupyter Notebook: https://jupyter-notebook.readthedocs.io/en/stable/
3. Git: https://education.github.com/git-cheat-sheet-education.pdf
4. Conda Issues: https://musa-550-fall-2020.github.io/guides/conda-issues

Any helps?

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