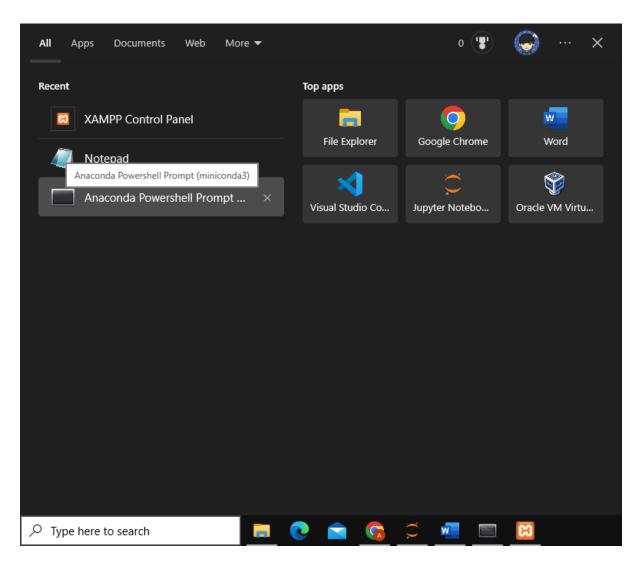
## Starting conda



## **Managing conda**

```
Anaconda Powershell Prompt (miniconda3)

(base) PS C:\Users\Abi Rahman> conda --version
conda 23.5.0
(base) PS C:\Users\Abi Rahman>
```

```
Anaconda Powershell Prompt (miniconda3)
                                                                                   ×
                                                                             numpy
                                     1.23.5-py310h60c9a35 0 --> 1.25.2-py310h055cbc ^
c 0
                                     1.23.5-py310h04254f7_0 --> 1.25.2-py310h65a83c
  numpy-base
 0
 openssl
                                           1.1.1u-h2bbff1b 0 --> 3.0.10-h2bbff1b 2
                                      1.5.3-py310h4ed8f06 0 --> 2.0.3-py310h4ed8f06
 pandas
 a
 platformdirs
                                      2.5.2-py310haa95532_0 --> 3.10.0-py310haa9553
2 0
 pygments
                     pkgs/main/noarch::pygments-2.11.2-pyh~ --> pkgs/main/win-64::p
ygments-2.15.1-py310haa95532_1
 pyopenssl
                                     23.0.0-py310haa95532 0 --> 23.2.0-py310haa9553
2 0
                                           3.10.9-h966fe2a_0 --> 3.10.12-he1021f5_0
 python
                                           3.41.1-h2bbff1b_0 --> 3.41.2-h2bbff1b_0
  sqlite
                                        6.2-py310h2bbff1b_0 --> 6.3.2-py310h2bbff1b
  tornado
 0
                                      4.4.0-py310haa95532_0 --> 4.7.1-py310haa95532
 typing-extensions
 typing_extensions
                                      4.4.0-py310haa95532_0 --> 4.7.1-py310haa95532
 urllib3
                                    1.26.15-py310haa95532_0 --> 1.26.16-py310haa955
32 0
                                          5.2.10-h8cc25b3 1 --> 5.4.2-h8cc25b3 0
The following packages will be DOWNGRADED:
                                      8.1.0-py310haa95532_0 --> 7.4.9-py310haa95532
 jupyter_client
Proceed ([y]/n)? y
Downloading and Extracting Packages
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
(base) PS C:\Users\Abi Rahman>
(base) PS C:\Users\Abi Rahman>
(base) PS C:\Users\Abi Rahman>
(base) PS C:\Users\Abi Rahman>
```

Create a new environment and install a package in it.

```
Anaconda Powershell Prompt (miniconda3)
                                                                              ×
  ca-certificates
                     pkgs/main/win-64::ca-certificates-2023.05.30-haa95532_0
  intel-openmp
                     pkgs/main/win-64::intel-openmp-2023.1.0-h59b6b97_46319
  libffi
                     pkgs/main/win-64::libffi-3.4.4-hd77b12b_0
                     pkgs/main/win-64::mkl-2023.1.0-h6b88ed4_46357
  mk1
  mkl-service
                     pkgs/main/win-64::mkl-service-2.4.0-py311h2bbff1b_1
  mkl fft
                     pkgs/main/win-64::mkl_fft-1.3.6-py311hf62ec03_1
                     pkgs/main/win-64::mkl_random-1.2.2-py311hf62ec03_1
  mkl_random
                     pkgs/main/win-64::numpy-1.25.2-py311hdab7c0b_0
  numpy
  numpy-base
                     pkgs/main/win-64::numpy-base-1.25.2-py311hd01c5d8 0
                     pkgs/main/win-64::openssl-3.0.10-h2bbff1b_2
  openssl
                     pkgs/main/win-64::pip-23.2.1-py311haa95532_0
  pip
  python
                     pkgs/main/win-64::python-3.11.4-he1021f5_0
  setuptools
                     pkgs/main/win-64::setuptools-68.0.0-py311haa95532 0
                     pkgs/main/win-64::sqlite-3.41.2-h2bbff1b_0
  sqlite
                     pkgs/main/win-64::tbb-2021.8.0-h59b6b97_0
  tbb
                     pkgs/main/win-64::tk-8.6.12-h2bbff1b_0
  tk
                     pkgs/main/noarch::tzdata-2023c-h04d1e81_0
  tzdata
                     pkgs/main/win-64::vc-14.2-h21ff451_1
  vs2015_runtime
                     pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
                     pkgs/main/win-64::wheel-0.38.4-py311haa95532_0
  wheel
                     pkgs/main/win-64::xz-5.4.2-h8cc25b3_0
  ΧZ
  zlib
                     pkgs/main/win-64::zlib-1.2.13-h8cc25b3 0
Proceed ([y]/n)? y
Downloading and Extracting Packages
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
 To activate this environment, use
      $ conda activate snowflakes
  To deactivate an active environment, use
      $ conda deactivate
(base) PS C:\Users\Abi Rahman> _
```

To use, or "activate" the new environment, type the following:

```
# $ conda deactivate

(base) PS C:\Users\Abi Rahman> conda activate snowflakes

(snowflakes) PS C:\Users\Abi Rahman> S_
```

To see a list of all your environments, type:

Change your current environment back to the default (base):

```
(snowflakes) PS C:\Users\Abi Rahman> conda activate
(base) PS C:\Users\Abi Rahman> _
```

## **Managing Python**

Create a new environment named "snakes" that contains Python 3.9: conda create --name snakes python=3.9

```
Downloading and Extracting Packages

Preparing transaction: done
Verifying transaction: done
Executing transaction: done

#

# To activate this environment, use

#

$ conda activate snakes

#

# To deactivate an active environment, use

#

$ conda deactivate

(base) PS C:\Users\Abi Rahman>
```

Activate the new environment:

```
(base) PS C:\Users\Abi Rahman> conda activate snakes
(snakes) PS C:\Users\Abi Rahman>
```

Verify that the snakes environment has been added and is active:

Verify which version of Python is in your current environment:

```
(snakes) PS C:\Users\Abi Rahman> python --version
Python 3.9.17
(snakes) PS C:\Users\Abi Rahman> _
```

Deactivate the snakes environment and return to base environment: conda activate

```
(snakes) PS C:\Users\Abi Rahman> conda activate (base) PS C:\Users\Abi Rahman> _
```

## Managing packages

- 1. To find a package you have already installed, first activate the environment you want to search. Look above for the commands to activate your snakes environment.
- 2. Check to see if a package you have not installed named "beautifulsoup4" is available from the Anaconda repository (must be connected to the Internet):

```
conda search beautifulsoup4
(snakes) PS C:\Users\Abi Rahman> conda search beautifulsoup4 Loading channels: done
# Name
                               Version
                                                  Build Channel
beautifulsoup4
                                 4.6.0
                                                 py27_1
                                                         pkgs/main
beautifulsoup4
                                 4.6.0 py27hc287451 1
                                                         pkgs/main
beautifulsoup4
                                 4.6.0
                                                 py35_1
                                                         pkgs/main
beautifulsoup4
                                 4.6.0
                                        py35h61fcdcc_1
                                                         pkgs/main
beautifulsoup4
                                                          pkgs/main
                                 4.6.0
                                                 py36
                                                      1
beautifulsoup4
                                 4.6.0
                                        py36hd4cc5e8_1
                                                          pkgs/main
beautifulsoup4
                                                 py37_1
                                 4.6.0
                                                          pkgs/main
beautifulsoup4
                                 4.6.1
                                                 py27_0
                                                          pkgs/main
```

Conda displays a list of all packages with that name on the Anaconda repository, so we know it is available.

3. Install this package into the current environment: conda install beautifulsoup4

Downloading and Extracting Packages
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
(snakes) PS C:\Users\Abi Rahman>

4. Check to see if the newly installed program is in this environment: conda list

```
(snakes) PS C:\Users\Abi Rahman> conda list
# packages in environment at C:\Users\Abi Rahman\miniconda3\envs\snakes:
# Name
                         Version
                                                    Build Channel
beautifulsoup4
                         4.12.2
                                           py39haa95532 0
ca-certificates
                         2023.05.30
                                              haa95532 0
openssl
                         3.0.10
                                               h2bbff1b 2
pip
                         23.2.1
                                           py39haa95532 0
python
                         3.9.17
                                               h1aa4202 0
setuptools
                         68.0.0
                                           py39haa95532 0
                                           py39haa95532 0
soupsieve
                         2.4
sqlite
                         3.41.2
                                              h2bbff1b 0
tzdata
                         2023c
                                               h04d1e81 0
                         14.2
                                               h21ff451 1
VC
                         14.27.29016
                                               h5e58377_2
vs2015 runtime
wheel
                         0.38.4
                                           py39haa95532_0
(snakes) PS C:\Users\Abi Rahman> _
```