Python, Anaconda, and Virtual Environments

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1 Installing Python and/or Anaconda

1.1 Download and Install

https://www.anaconda.com/products/distribution
Download corresponding version of Anaconda for your operating system.
Follow the instructions using recommended settings

1.2 Adding to Path

This step will vary significantly for each OS

1.2.1 What is Path?

Path is an environmental variable which allows programs to be run from the command line/terminal without being directly accessed in the current folder (or without a directory being provided). This means that any program or folder of programs added to Path will function with just their command entered into any terminal.

1.2.2 Benefits of Adding Programs to Path

here are many benefits to doing this - notably you can execute programs with considerably less setup and it makes detection of system commands (built by those programs) much easier

1.2.3 Risks of Adding Programs to Path

There are system commands that, if overridden, can severely mess up your computer if they can no longer be executed (this is mainly an issue on Windows, thankfully this is easily reversible)

1.3 MacOS or Linux

Anaconda should add itself to PATH during setup

1.4 Windows

Anaconda recommends against being added to PATH and can function entirely through the Anaconda Prompt, but configuring for the command line is possible (and makes some use cases easier).

1. Find the folder to which Anaconda was installed and copy the file directory name to the ⟨install location⟩/bin/activate

2. Open the environmental variables settings menu and click the edit button. Find the Path variable.

3. Add a new entry and paste the copied directory name.

4. Reboot the command prompt/powershell and run "conda -V" to check if it installed correctly.

5. This should also add Python to path so running "python -V" or "python3 -V" should work as well now