

Command-line programs with Python

EOAS Software Carpentry Workshop

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Command-line programs

1. Create a Python module containing functions that can be import-ed into notebooks and other modules.
2. Use the values of command-line arguments in a program.
3. Read data from standard input in a program so that it can be used in a pipeline.

Switching to shell commands

\$ in front of a command that tells you to run that command in the shell rather than the Python interpreter

Write a command-line program that does addition and subtraction:

```
& python arith.py add 1 2
```

```
3
```

```
& python arith.py subtract 3 4
```

```
-1
```

Rewrite `readings.py` so that it uses `-n`, `-m`, and `-x` instead of `--min`, `--mean`, and `--max` respectively. Is the code easier to read? Is the program easier to understand?

Using the glob module introduced earlier, write a simple version of ls that shows files in the current directory with a particular suffix. A call to this script should look like this:

```
$ python my_ls.py py
```

```
left.py  
right.py  
zero.py
```

Separately, modify `readings.py` so that if no action is given it displays the means of the data.