Notation and Terminology

Here are some common phrases that appear in the instructions for computational exercises, with examples of the corresponding code.

Files

- Open X for reading (or writing) using file handle Y:

```
Y = open(X)
Y = open(X, 'w')
```

Loops

- Use X to loop over Y
  or: Loop over Y using X:

```
for X in Y:
```

Calling functions

- Set Z to the result of calling F on X and Y:

```
Z = F(X, Y)
```

- Call F on X and Y:

```
F(X, Y)
```

Calling methods of an object

- To emphasize something is a method call it will be shown with a dot: `.met()`. That's a reminder that the actual call will have the form `obj.met()` where `obj` is the object whose method is being called.
- Set `R` to the result of calling the `.met()` method of `obj` with argument `A`
  or: Set `R` to the result of calling `obj`'s `.met()` method with argument `A`
  or: Set `R` to the result of calling `.met()` on `obj` with argument `A`:

```
R = obj.met(A)
```

- Call the `.met()` method of `obj` with argument `A`
  or: Call `obj`'s `.met()` method with argument `A`
  or: Call `.met()` on `obj` with argument `A`:

```
obj.met(A)
```

Working with dictionaries

- Set the value of X in Y to Z:

```
Y[X] = Z
```

- Set Z to the value of X in Y:

```
Z = Y[X]
```

- The keys or values of X:

```
X.keys()
X.values()
```