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# **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()
```