Science One CS 2015-2016

Class 1: variables and types

September 15, 2015

Notes by Edward Le, small edits by Mike Gelbart

Variables: `x=`

= means "gets the value of"

Data Types	Examples
Integers (int)	1
Strings (str)	"Hello"

Once the value of a variable is written, new lines of code can **override them.**

Ex.

`x = 5`

`print "x"` vs `print x`

Then a **new line of code is written:**

`x = 7`

The old line of code `x=5` is now overwritten/forgotten

`y` can be set equal to `x`, **but,** what x = must be set **before writing y=x**

`my_string = "phrase of data"`

`my_integer = 5`

`my_string` and `my_integer` are variables

a string is a series of characters
a literal means typing in **exactly what is wanted**.

Literal strings are written with double quotes (" ")

Different Types of Data and Their Results:

You can manually **cast** a variable from one type to another like so:

```
integer_turned_string = str(my_integer)

integer_turned_string

integer_turned_string + "a"
```

The `str(<thing>)` command attempts to turn `<thing>` into a string
And `int(<thing>)` command attempts to turn `<thing>` into an integer