CS 1110 Spring 2018: Announcements

Sections
- Please go only to the Section you are enrolled in
- See our Section Swapping Station on Piazza:
  https://piazza.com/class/jckqwmqflaz6i?cid=10

Enrollment
- There is a lot of turnover in the first week. Don’t give up!
- Perhaps another class meets your needs?

AEW Workshops (ENGRG 1010) Open to all students.

Communication

- Includes two profs, head TAs
- Main correspondence. Don’t email only one prof, or both separately

- Includes: both profs, admin assistant, graduate TAs, head consultants
- “Emergency contact number.” Nobody at office hours; Lab has no printouts, etc.

Piazza: not required, but fast (link on class website)

Email from us: please check your spam filters for mail from AWB93, LJL2, cs1110-prof, or with [CS1110] in the subject line.

Lectures

Lectures:
- Not just talking! Demos, clicker questions, etc.
- Every Tuesday/Thursday (9:05 or 11:15)
- Attend either, 11:15 is recorded by VideoNote
- Handouts (including this one!) posted to website afternoon before class
- Slides and code posted to the website after class

Please, no cell phones during lecture (except for during a Clicker question)

Lab Sections (aka Sections)

- guided exercises with TAs & consultants
- Start Tuesday, January 30
- Go to the lab section you are registered for. We can’t maintain workable staff/student ratios otherwise.
- Need a different Section? See our Section Swapping Station on Piazza: https://piazza.com/class/jckqwmqflaz6i?cid=10
- Not enrolled in a lab section? Don’t panic. Do the lab on your own. If a lab section opens up, check it in then.
- Handouts posted to the website the Monday before
- Mandatory. Missing > 2 can lower your final grade.

Class Materials

Textbook. Think Python, 2nd ed. by Allen Downey
- Supplemental; does not replace lecture
- Available for free as PDF or eBook
- First edition is for the Python 2 (bad!)

iClicker. Optional but useful.
- Will periodically ask questions during lecture
- Not part of the grade → no registration
- We do support REEF Polling.

Python. Necessary if using your own computer
- See course website for how to install

Things to do before next class

1. Read textbook
   - Chapter 1 (browse)
   - Chapter 2 (in detail)
2. (If using your own computer) Install Python following our instructions:
3. Look at first lab handout (available Monday)
4. (optional) Join Piazza, a Q&A forum

Everything is on website!
- Class announcements
- Consultant calendar
- Reading schedule
- Lecture slides
- Exam dates
- Piazza instructions
Check it regularly: www.cs.cornell.edu/courses/cs1110/2018sp/
Expressions

An expression **represents** something

- Python **evaluates it** (turns it into a value)
- Similar to a calculator

Examples:

- 2.3
- \((3 \times 7 + 2) \times 0.1\)

Types

A set of values & operations on these values

- Examples of operations: \(+\), \(-\), \(/\), \(*\)
- Meaning of operations depends on type

Memorize this definition!

Type: **int** (integers)

**Values:** \(\ldots, -3, -2, -1, 0, 1, 2, 3, 4, 5, \ldots\)

- More Examples: \(1, 48, 43028030\)
- (no commas or periods)
- Division (technically a float operator)
- Operations: \(+\), \(-\), \(*\), \(^{\text{**}}\), \(/\), \(\%\), unary \(-\)

Type: **float** (floating point)

**Values:** (approximations of) real numbers

- With a ".": a float literal (e.g., \(2.0\))
- Without a decimal: an int literal (e.g., \(2\))

**Operations:** \(+\), \(-\), \(*\), \(^{\text{/}}\), \(^{\text{\text{\%}}}\), unary \(-\)

**Notice:** operator meaning can change from type to type

- Exponent notation useful for large (or small) values
  - \(-2.81e6\) is \(-2.81 \times 10^6\) or \(-2,251,000\)
  - \(2.81e-8\) is \(2.81 \times 10^{-8}\) or \(0.0000000281\)

Type: **bool** (boolean)

**Values:** True, False

- Boolean literals True and False (must be capitalized)

**Operations:** not, and, or

- not b: True if b is false and False if b is true
- b and c: True if both b and c are true; False otherwise
- b or c: True if b is true or c is true; False otherwise

Often come from comparing int or float values

- Order comparison: \(1 < j\) \(1 \leq j\) \(i > j\) \(i > j\)
- Equality, inequality: \(i == j\) \(i != j\)

"=" means something else!

Type: **str** (string) for text

**Values:** any sequence of characters

**Operation(s):** \(\ +\) (catenation, or concatenation)

**Again:** operator + changes from type to type

**String literal:** sequence of characters in quotes

- Double quotes: " abe\$\&c4" or "Hello World!"
- Single quotes: 'Hello World!'

Concatenation applies only to strings

- "ab" + "cd" evaluates to "abcd"
- "ab" + 2 produces an error