

Compsci 101

Introduction

Live Lecture

<code>sum(lst)</code>	sum of the elements in lst
<code>max(lst)</code>	maximum value of lst
<code>min(lst)</code>	minimum value of lst
<code>.append(elm)</code>	Mutates the list by adding elm to the end of the list
<code>.count(elm)</code>	Number of times see elm in the list

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Announcements

- Assignment 1 Totem due today, Feb 11, 11:30pm
 - Also REFLECT Form due same time
 - Get one grace day, but no consulting hours on Friday
- APT-2 out Tues, Feb 16
- Exam on Tuesday!, Feb 16
- Exam 1 Question session – Sunday Feb 14, 4pm
 - Use lecture zoom link, recorded
 - Bring questions, if no questions, it will be short!

PFTD

- Lists continued
- String methods and more
- Exam 1

Exam 1 Rules

- This is your own work, no collaboration
- Open book, Open notes
- Do not search for answers on the internet
- Do not type in code where it can be compiled and run
 - Do not use Pycharm, textbook code boxes, Python tutor or any other place the code can be run
- Do not talk to anyone about the exam during the exam, and until it is handed back!

Exam 1 Logistics

- Take on Tues. Feb 16 between 7am and 11pm
- You pick the start time
 - Must start by 9:15pm
- You get 1 hour 45 min
 - Longer if you have accommodations
- Once you start, your timer starts and you must finish in 1 hour, 45 minutes
- You cannot pause the timer

Exam 1 Logistics (2)

- Go to Gradescope to start
 - login with your netid
 - select the CompSci 101 **Exam** site
 - Different site than where you turn in assignments
- Click on **Exam 1** to start
- Gradescope saves answers as you type them in
 - Type 4 spaces to indent code
- Disconnected? Just log back in to Gradescope
- Question? Post a private post on Piazza

**Don't go to Gradescope site until
you are ready to start!**

You click it, you have started!

We do not restart it!

WOTO-1 Cloning
<http://bit.ly/101s21-0211-1>

List Concatenation Steps

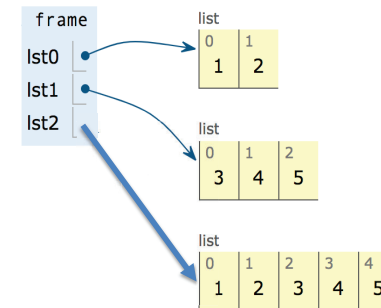
1. Calculate the length of the new list
2. Create list of that length
3. Copy values from first list
4. Copy values from second list
5. Assign the variable to the new list

Brand new list!

Concatenation:

length, create, copy, copy, assign

- 1 `lst0 = [1,2]`
- 2 `lst1 = [3, 4, 5]`
- 3 `lst2 = lst0 + lst1`



WOTO-2 – Mutable
<http://bit.ly/101s21-0211-2>

List Mutation: `.append(...)`

- `.append()` – list function that adds element to end of list
 - Mutates list to left of “.”
 - “.” – call function to the right of the dot on the thing to the left of the dot (LEFT.RIGHT)

Same list!

WOTO-3– List Append

<http://bit.ly/101s21-0211-3>

- Try drawing it out if you aren't sure!

String's split(...)

- Strings have functions too!
- **TYPE_STRING.FUNCTION(PARAMETERS)**
 - “.” means apply function to what is on the left

String's split(...)

- Strings have functions too!
- **TYPE_STRING.FUNCTION(PARAMETERS)**
 - “.” means apply function to what is on the left
- **'red fish blue fish'.split()** returns a list
 - ['red', 'fish', 'blue', 'fish']

String's join(...)

- **TYPE_STRING.join(SEQ_OF_STRINGS)**
 - Opposite of .split()
 - Creates string from sequence's items separated by the string to the left of **join**

String's join(...)

- **TYPE_STRING.join(SEQ_OF_STRINGS)**
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- **'ish'.join(['f','w','d','end'])**
 - 'fishwishdishend'

WOTO-4 – Split and Join
<http://bit.ly/101s21-0211-4>

More Methods

String

.find(s)	index of first occurrence of s
.rfind(s)	index of last occurrence of s (from Right)
.upper()/ .lower()	uppercase/lowercase version of string
.strip()	remove leading/trailing whitespace
.count(s)	number of times see s in string
.startswith(s)	bool of whether the string begins with s
.endswith(s)	bool of whether the string ends with s

List

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