CS21: INTRODUCTION TO COMPUTER SCIENCE

Prof. Mathieson

Fall 2017

Swarthmore College

Informal quiz (discuss with a partner)

parameter
constructor
function
int
Circle
float
data
getter
method
Point

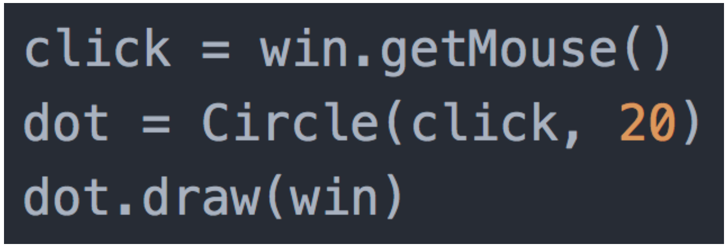
1) What is the code below doing?

2) The type of **click** is ______.

3) The type of **click.getX()** is ________ and the type of **dot.getCenter()** is _______.

4) **getX()** and **getCenter()** are examples of _________. They do not take in any ________. They return ________.

5) True or False: if a graphics object is not visible on the graphics window, it does not exist.



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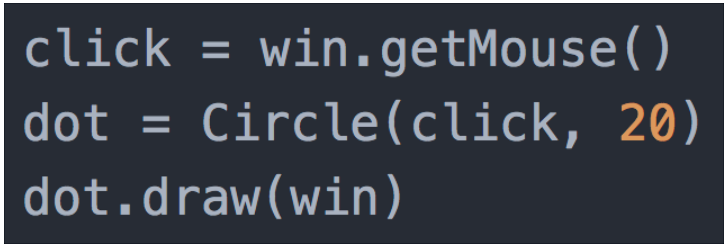

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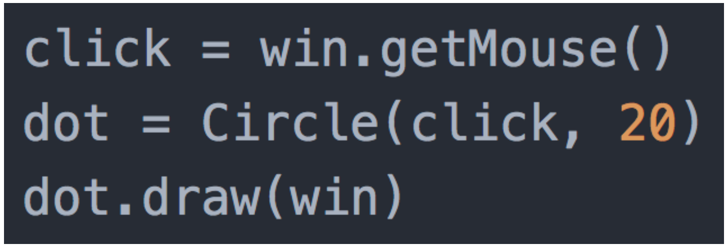

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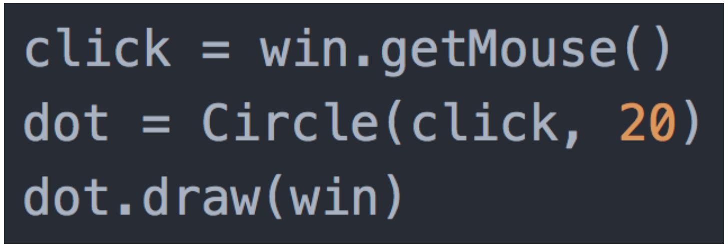

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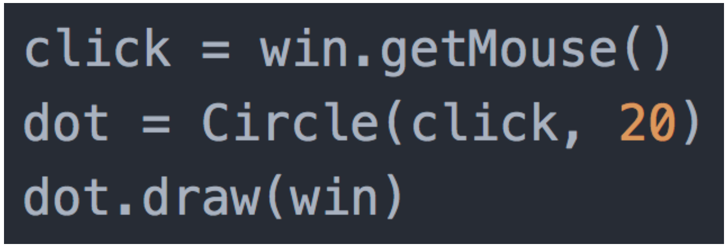

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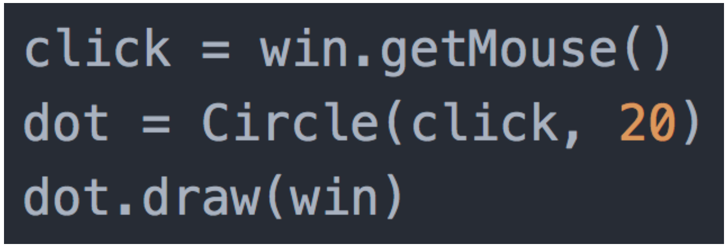
False!



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Outline Oct 9:

- Recap user clicks and getters
- Lists as a data structure
- Mutability and modifying lists
- Functions that modify lists
- List modifying practice: **build_list.py, shuffle_list.py**

Notes

•Quiz 2 returned Wednesday
•Lab 4 returned Friday
•Lab 5 due **Saturday** night
•Office Hours 3-5pm Friday (or by appointment)

Lab 3 examples

(not posted online)

Lists

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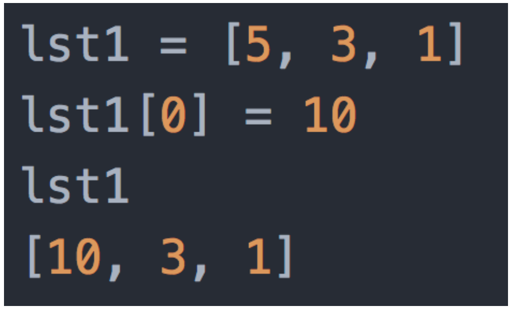

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lst1 = [5, 3, 1]
lst1[0] = 10
lst1
[10, 3, 1]
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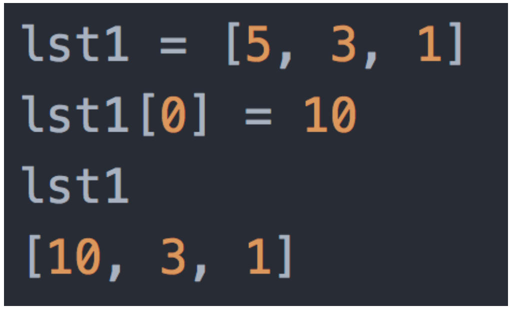

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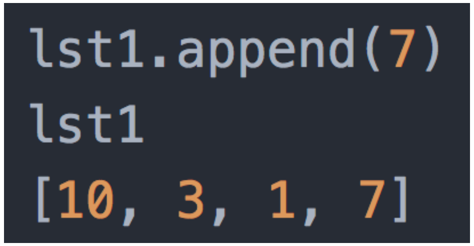
- We can add elements to a list



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lst1.append(7)
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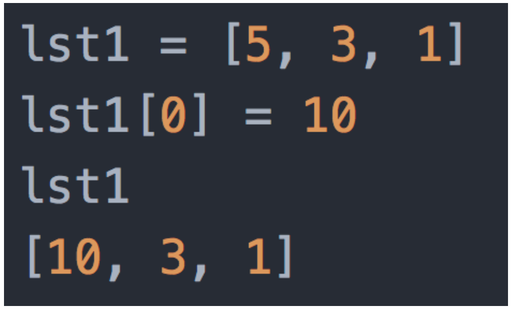

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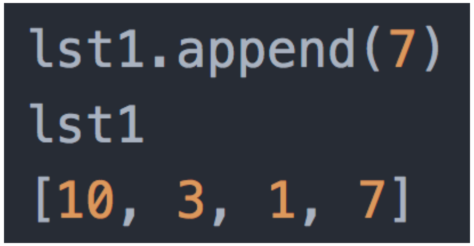

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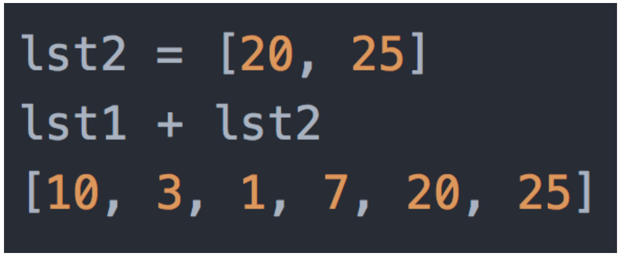
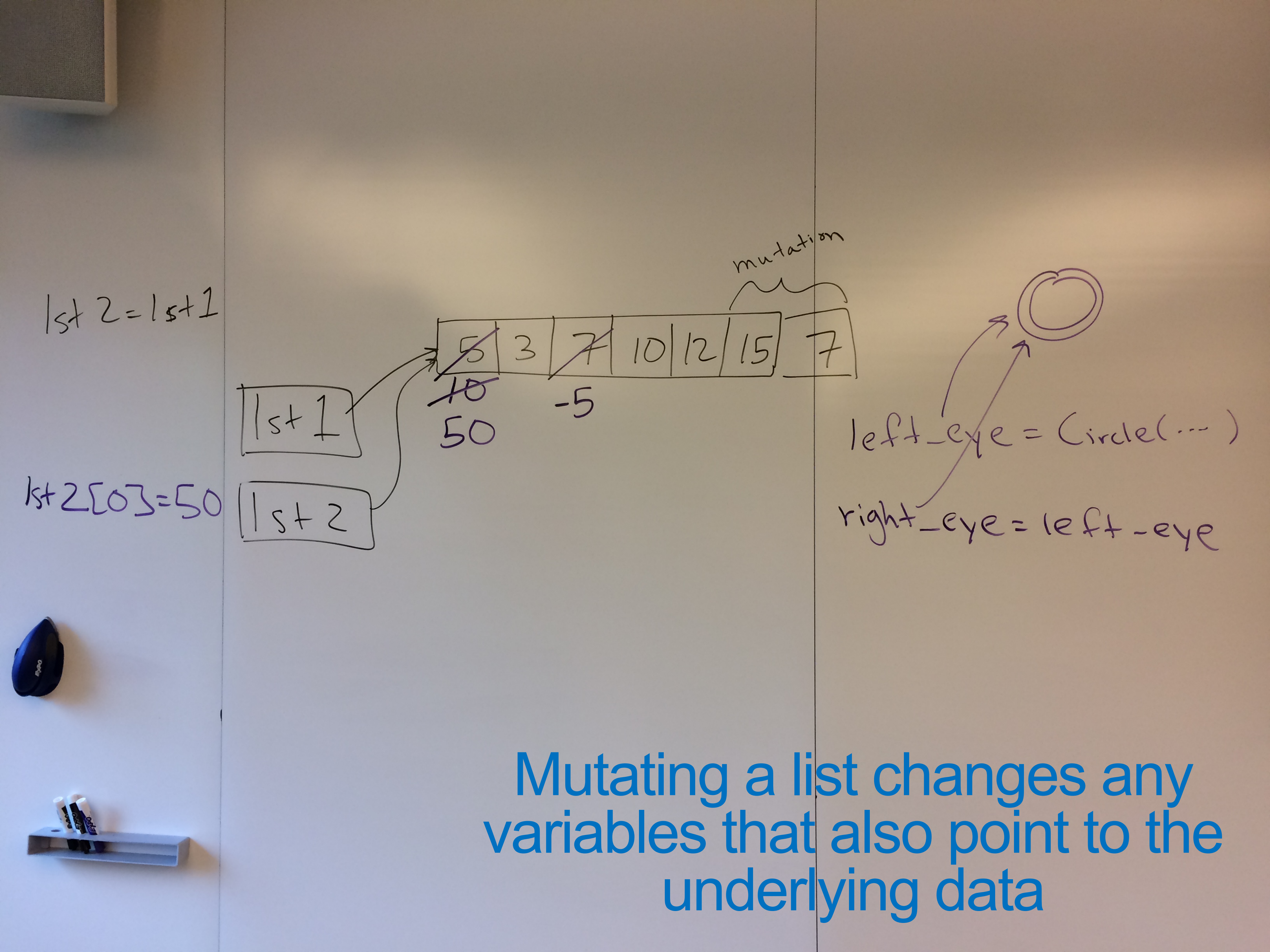
- Concatenating lists



```
lst2 = [20, 25]
lst1 + lst2
[10, 3, 1, 7, 20, 25]
```



```
lst 2 = lst 1
lst2[0]=50
left_eye = Circle(... )
right_eye = left_eye
```

Mutating a list changes any variables that also point to the underlying data

List programs for today

- **build_list.py** (together)
- **shuffle_list.py** (pair programming)