

CS 160

CS Orientation

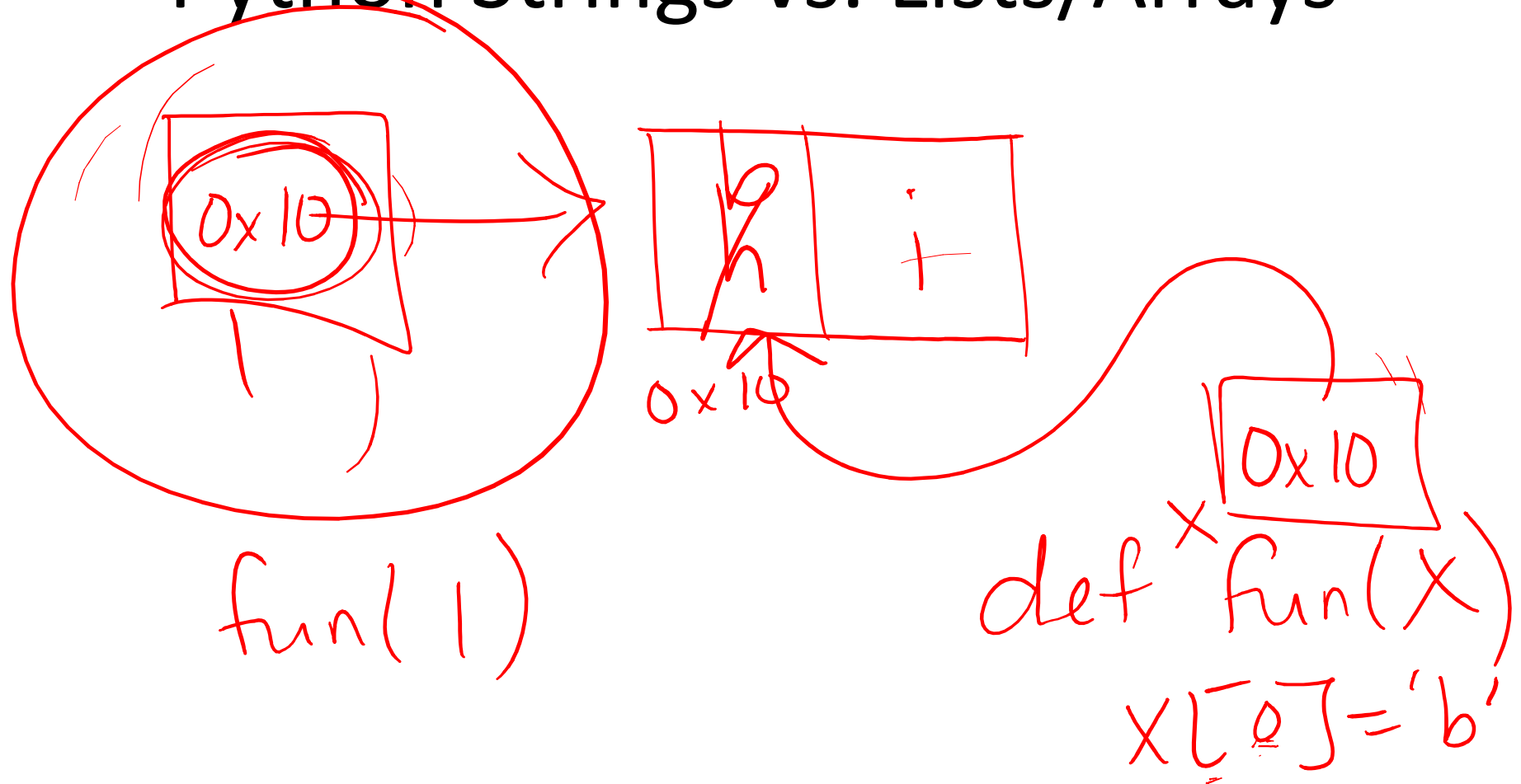
More Lists in Python...

Odds and Ends

- Testing out of CS 161 – Get the override and sign up to challenge now! You have to have a grade before getting into CS 162.
- No lab this week!
- No demo hours this Friday, demo M-R!
- Assignment #8...

Python Strings vs. Lists/Arrays

immutable mutable



2. ENGR

Re-attachFullscreenStay on topDuplicate

Close

```
1 def fun(x):
2     x+='b' #works on strings and lists, but only changes lists outside fun
3     x[0]='b' #only works on lists, not strings
4     print(x[0])
5
6 def main():
7     s="hi" #string
8     l=['h','i'] #list of characters
9     fun(s)
10    print(s)
11    fun(l)
12    print(l)
13
14    i=[1,2,3] #make a list of integers
15    i2=i #make i2 refer to i
16    print(i)
17    print(i2)
18
19    i=i+[6] #this will only change i and not i2, i+=[6] will change both
20    print(i)
21    print(i2)
22
23 main()
```

"strings.py" 23L, 459C19,4All

1-d

1	2	3	4	5
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2-D Array Demo...

$i = []$

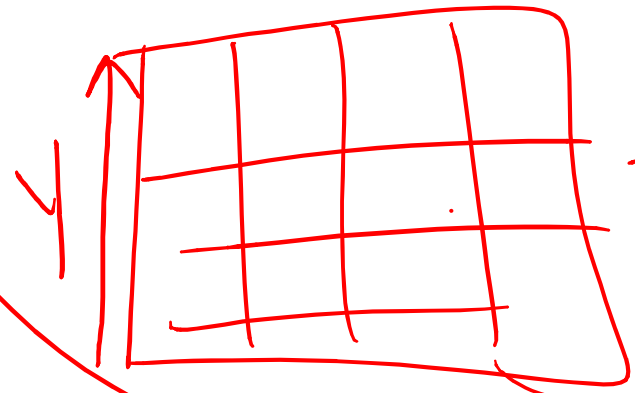
$i.append(1)$
 (2)

$i = []$

$i = [1, 2, 3, 4, 5]$

- What is it? *square,*
- When would you use one?

matrix - rows/cols
grid - y, x



$[row][col]$

$i = [0] * num$
 $len(i)$

0	0	0	0	0
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$i[0] = 1$
 $i[1] = 2$