CompSci 101
Introduction to Computer Science

January 27, 2015

Prof. Rodger
Announcements

• Reading, RQ 06 next time

• Assign 2 due today, Assign 3 out

• APT 2 is due on Thursday

• Lab 3 this week

• Finish working on APT Pancakes
APT Pancakes....(cont)
import turtle
wn = turtle.Screen()

def square (alex):
    alex.forward(100)
    alex.left(90)
    alex.forward(100)
    alex.left(90)
    alex.forward(100)
    alex.left(90)
    alex.forward(100)
    alex.left(90)

if __name__ == '__main__':
    timmy = turtle.Turtle()
    square(timmy)

wn.exitonclick()
Assignment 3

• Draw a picture
Computer Science Alum

- Biology and CS
- Undergraduate Research - JFLAP
- Epic
- Now in Med School at Vanderbilt
More Computer Science Duke Alums
More on Strings

- Strings are indexed starting at 0
- Example: ‘word’

```
word
```

```
0 1 2 3
```

- Use [num] – to refer to a particular character in word
- Use [x:y] to refer to a slice of the string starting at position x and up to but not including position y. Can leave out x or y.
Examples

phrase = "Duke Blue Devils"

print phrase[0]
print phrase[-3]
print phrase[1:3]
print phrase[5:10] + phrase[:4]
print
(print(phrase[phrase.find('ev'):]).upper())
Loop over all characters in a String

def mystery(word):
    answer = ""
    for ch in word:
        if ch.lower() != 'e':
            answer = answer + ch
    return answer
Loop over string

• Online form: www.bit.ly/101S15-0127-02

```python
def mystery2(word):
    count = 0
    for ch in word:
        count = count + 1
    return count

def mystery3(word):
    answer = 0
    for ch in word:
        if ch.lower() != 'e':
            answer = answer + 1
    return answer
```
Loop over all words in a list

def mysteryList(phrase):
    for word in phrase.split():
        print word
Loop over words


```python
def mystery4(phrase):
    count = 0
    for word in phrase.split():
        count = count + 1
    return count

def mystery5(phrase):
    hold = phrase.split()
    answer = hold[0]
    for word in hold[1:]:
        if word[0].lower() != 'b':
            answer = answer + " " + word
    return answer
```

compsci101 spring 2015
APT Emphasize