#1 Control and Environments

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Roses are red
Violets are blue
While x < 61
Increment it by 2
Hello

If you're new, welcome!

• TA: Jerry Chen (jerry.c@berkeley.edu)
• Where to find resources
• Reminder on policies
NO ELECTRONICS ALLOWED IN CLASS?

DROPS OUT
Labs and Projs are graded on **completeness**

Homework is graded on **effort**

**Attendance** is tracked for discussion, but not lab
Dogs or cats?
37 responses

- Dogs: 70.3%
- Cats: 21.6%
- Meh: 8.1%
Dogs win! (again)
Fall 2017

Dogs or cats?

22 responses

- Dogs: 63.6%
- Cats: 18.2%
- Meh: 18.2%
Dogs or cats?
33 responses

- Dogs: 84.8%
- Cats: 15.2%
Fall 2016

Dogs or cats?

14 responses

- Dogs: 28.6%
- Cats: 64.3%
- Meh: 7.1%
If you weren't here for disc00
v.gd/disc00
Shameless plug

Learn how to use Git

http://tinyurl.com/csmgit (Completely optional)

• Where: HP Auditorium in Soda
• When: Saturday 1pm-3pm (you can come late/leave early)
• Why: Industry standard for code backup and collab
Control

The missing link for all of computer science*

* Statement not endorsed by CS 61A staff pls don't get me in trouble
Computers aren't so complicated
Storage
Storage  Arithmetic  Control
Booleans

Basic operators

- **Not** negates
- **And** is truthy if both truthy
- **Or** is truthy if either is truthy
Booleans

Short circuiting

False and 1 / 0
Booleans

Short circuiting

False and 1 / 0
True or 1 / 0
if statement

1 if n > 10:
2     print("Big")
3 elif n > 5:
4     print("Medium")
5     ...
6 elif n > 0:
7     print("Small")
8 else:
9     print("Nothing")
if statement

```python
if n > 10:
    print("Big")

if n > 5:
    print("Medium")

elif n > 0:
    print("Small")

else:
    print("Nothing")
```
while loop

```python
1 x = 0
2 while x < 61:
3   x = x + 2
4   print(x)
```
while loop

```
1 x = 0
2 while x < 61:
3     x = x + 2
4     print(x)
```
while loop

```python
x = 0
while x < 61:
    x = x + 2
    print(x)
```
while loop

1  x = 0
2  while x < 61:
3      x = x + 2
4      print(x)

2
4
...
62
FizzBuzz

Warmup problem

For every number from 1 to n:

- For multiples of three, print "Fizz"
- For multiples of five, print "Buzz"
- For multiples of both three and five print "FizzBuzz" only
- Otherwise, print the number
def fizzbuzz(n):
    i = 1
    while i <= n:
        if i % 3 == 0 and i % 5 == 0:
            print('FizzBuzz')
        if i % 3 == 0:
            print('Fizz')
        if i % 5 == 0:
            print('Buzz')
        else:
            print(i)
        i += 1
def fizzbuzz(n):
    i = 1
    while i <= n:
        if i % 3 == 0 and i % 5 == 0:
            print('FizzBuzz')
        elif i % 3 == 0:
            print('Fizz')
        elif i % 5 == 0:
            print('Buzz')
        else:
            print(i)
    i += 1
Site Reliability Engineer Interview

Anonymous Interview Candidate

- No Offer
- Positive Experience
- Difficult Interview

Application
I applied through a recruiter. The process took 2 weeks. I interviewed at LinkedIn.

Interview
They reached out to me on LinkedIn and I was selected for a phone screen. After passing the phone screen they set you up to interview with two people that currently have your job. If you pass the first interview, which is more code based, they move you to the 2nd interview which is more systems based. I didn't get the job but learned a lot about how a good...

Interview Questions
Asked about API calls and parsing data returned from them.
Fizzbuzz.

Answer Question
Interview

They reached out to me on LinkedIn and I was selected for a position. After passing the phone screen they set you up to interview with two people. If you have your job. If you pass the first interview, which is more coding based, you move on to the 2nd interview which is more systems based. I didn't get hired. I was told about how a good...

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Interview Questions

Asked about API calls and parsing data returned from them. Fizzbuzz.

Answer Question
Interview

They reached out to me on LinkedIn and I was selected for a phone interview. If you pass the phone screen they set you up to interview with two other managers, which basically means you have your job. If you pass the first interview, which is more communication based, it moves you on to the 2nd interview which is more systems based. I didn't get invited to the interview, which was about how a good...

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Interview Questions

Asked about API calls and parsing data returned from them. Fizzbuzz.

Answer Question
Higher Order Functions
Higher Order Functions

Pass around functions like any other variable
- Function argument
- Return value

More possibilities for abstraction
Higher Order Functions

Example from Lab 01

```python
1 def compose_twice(f, x):
2     return f(f(x))

4 def square(x):
5     return x * x

7 compose_twice(square, 2)
```