On your way in...

Pick-up
1. POGIL Activity #41
2. POGIL Activity #28

Hand-in
1. HW9 (2 piles, <50)
LAB 6 (ORACLE) IS GRADED.

1. cd ~/cs134/lab6
2. Type git pull
3. emacs GradeSheet.txt
Welcome to CS 134!

Introduction to Computer Science
Iris Howley

- Object Persistence -
Twenty Questions Tree

```python
__slots__ = [('_value', '_left', '_right')]
```

Questions stored as the value

- Is it alive?
  - yes
  - Does it have 8 legs?
    - yes
      - Is it an octopus?
        - yes
          - Is it a pretzel?
            - yes
              - Is it a table?
            - no
              - Is it sweet?
                - yes
                  - Does it have 4 legs?
                    - yes
                      - Is it a table?
              - no
                - Is it food?
                  - yes
                      - Does it have 4 legs?
                        - yes
                          - Is it a table?
                  - no
```

‘yes’ goes to the left
‘no’ to the right

If it’s a leaf, it’s a guess

If it’s a leaf, it’s a guess
A program to play 20 Questions, using our tree data structure

See shared/examples/04.22
OBJECT PERSISTENCE

Storing objects for future use.
POGIL Activity #41 – object persistence

• Find a partner and spend a few minutes discussing your responses to the POGIL worksheet, Question 1-3.

• Be prepared to report out your responses!

This is a brand new POGIL activity, let me know if you encounter any issues, typos, etc.
Time’s up!
Report out!
Object Persistence

HOW MIGHT THIS BE USEFUL FOR OUR GAME OF TWENTY QUESTIONS?
VARIADIC ARGUMENTS

For arguments of arbitrary lengths.
POGIL Activity #28 – variadic arguments

• Find a partner and spend a few minutes discussing your responses to the POGIL worksheet, Question 3, 5, and 6.

• Be prepared to report out your responses!

(Highly recommend doing activities 1 & 2 on your own, after class)

This is a brand new POGIL activity, let me know if you encounter any issues, typos, etc.
Time’s up!
Report out!
WORK THROUGH ALL POGIL ACTIVITIES AFTER CLASS

It’s good practice!
Example Code

• cd ~/cs134/shared/examples/04.24
• git pull
• emacs q20.py
QUESTIONS?
Leftover Slides
Binary Tree Data Structure

• POGIL Activity #20 (Renamed #40) goes over the specifics of the Binary Tree data structure

• shared/examples/04.22 has the code for Binary Tree