Check the class web page (and discussion board, linked from webpage) for news and info:

https://sites.google.com/a/eng.ucsd.edu/cse-8a-fall-2013/home

Lab starts this week. Discussion starts this week. Tutor hours started over the weekend.

My (final) office hours: M 1-2pm, Th 3:30-4:40pm and by appointment

Lab starts tomorrow. Check your email for seating assignment. BE ON TIME!

TODO:

– Reading for next class (on website – schedule and assignments page)
– Enrichment video!
– PSA1 due tomorrow midnight – Submission instructions posted
– PSA1 interview due Friday by noon.
Enrollment update!

• (Almost) everyone has been cleared to enroll!
  – There are a few exceptions. 😞

• You MUST register for BOTH 8A and 8AL!!!

• You must do this ASAP!

• You may not get your first choice section (sorry)
• You MUST show up to YOUR lab (the one you’re enrolled in) on time (or early)
  – It’s a 40 minute sprint… (then a 10 min quiz)
  – If you show up more than 5 minutes late or to the wrong section you will lose all your participation points.
  – Lab is in B230 (BASEMENT, elevator or outside entrance – no stairs from 1st floor)
Reading Quiz

CLICKERS OUT
1. What does the following code do?

```java
World myWorld = new World();
System.out.println(myWorld);
```

A. Create a new World with 1 turtle and print out the size of the world
B. Create an empty new World and print out the size of the world
C. Nothing, the code is incorrect
2. Complete the following line of code to create a new Turtle object in the middle of myWorld:

Turtle myTurtle =

A. new Turtle(myWorld);
B. new Turtle();
C. new World();
D. myWorld(myTurtle);
3. What is the line of code that will cause myTurtle to move forward 100 units?

A. `myTurtle(100);`
B. `myTurtle.100;`
C. `myTurtle.forward = 100;`
D. `myTurtle.forward(100);`
4. In the context of calling a method, what is a parameter list (`parameterList`)?

A. A list of numbers telling a Turtle where to go
B. A list of addition information that describes what we want the object calling the method to do
C. A list of objects that have been created.
Review: Dr. Java IDE

- Which pane holds the permanent copy of a Java code (like an email) and which holds temporary interactions that can’t be saved (like an IM session)?

Can you do LG2 now?
Review: Terminology

Turtle turtle1 = new Turtle();
turtle1.turn(-45);

1) SOLO VOTE (30 secs)
2) Discuss in team (1 min)
3) GROUP VOTE (20 sec)

A. Type, Class, parameter list
B. Class, Object, method name
C. Object, method name, parameter list

Does your team know what these terms mean/are?
CS Concept: Syntax

What is wrong with the following code?

```java
World world1 = new World(200,100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.forward(50);
maria.turnLeft;
maria.turnRight;
maria.forward(25);
```

A. Nothing
B. It is missing a semi-colon
C. turnLeft and turnRight should be followed by ()
D. turnLeft and turnRight are supposed to take parameters
What does this code draw?

```
World world1 = new World(200, 100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.turnLeft();
maria.forward(50);
maria.turnRight();
maria.forward(25);
```

Hint: Turtles start facing “up”
CS Concept: Sequential Execution

World world1 = new World(200, 100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.turnLeft();
maria.forward(50);
maria.turnRight();
maria.forward(25);

Vs.

World world1 = new World(200, 100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.forward(50);
maria.turnLeft();
maria.turnRight();
maria.forward(25);
What does this code output?

World world1 = new World(200, 100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.forward(50);
maria.turnLeft();
maria.turnRight();
maria.forward(25);

Hint: Turtles start facing “up”

A

B

C

D
CS Concept: Sequential Execution

World world1 = new World(200, 100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.turnLeft();
maria.forward(50);
maria.turnRight();
maria.forward(25);

Vs.

World world1 = new World(200, 100);
Turtle maria = new Turtle(100, 50, world1);
maria.forward(25);
maria.forward(50);
maria.turnLeft();
maria.turnRight();
maria.forward(25);
ORDER MATTERS!
How many objects are created in this code?

World world1 = new World(200, 100);
Turtle maria = new Turtle(25, 25, world1);
Turtle jose = new Turtle(100, 50, world1);
maria.forward(25);
jose.forward(10);
maria.turnLeft();
maria.forward(50);
jose.forward(5);

A. 1
B. 2
C. 3
D. 4
What does this code output?

```java
World world1 = new World(200, 100);
Turtle maria = new Turtle(25, 25, world1);
Turtle jose = new Turtle(100, 50, world1);
maria.forward(25);
jose.forward(10);
maria.turnLeft();
maria.forward(50);
jose.forward(5);
```

Hint: Turtles start facing “up”
CS Concept: Objects

“Give me a new object, please”

Turtle maria = new Turtle(25, 25, world1);

What kind of object

A variable that refers to the object

The code that creates the object (constructor)
CS Concept: Objects

Turtle maria = new Turtle(25, 25, world1);
Turtle jose = new Turtle(100, 50, world1);

Two different turtles objects (instances of class Turtle) with the same capabilities
Other important Turtle methods (know these)

- turn
- penUp
- penDown
- show
- hide
- moveTo
- setName
- getName

http://www.cs.duke.edu/courses/fall06/cps001/doc/mediaClasses/SimpleTurtle.html
Filenames: Imagine we write the following code...

```java
public class SpecialTester
{
    public static void main(String []args)
    {
        World w = new World();
        Turtle t = new Turtle(10, 10, w);
        t.drawSquare();
    }
}
```

What should we save it as?

- A. SpecialTester.java
- B. Turtle.java
- C. Any name you want
- D. drawSquare.java