

# 15-110 Recitation Week 1

## Reminders

- Check1 due at Noon EDT Wednesday 9/8!
- Exercises are after every lecture
- Post recitation feedback form: <https://forms.gle/m1VtwJvTE6kfAXRg6>

## Overview

- TA + student introductions, Course Logistics
- Algorithms
- Programming Basics
- Create basic Pyzo program file

## TA + Student Introduction:

# Problems

## ALGORITHMS

- 1) Suppose you have quarters, nickels, dimes, and pennies and want to make change for a certain number of cents, how would you get change in the fewest number of coins? Write an algorithm to solve this, using moderate abstraction (assume the user understands basic arithmetic and the values of coins).

## PROGRAMMING BASICS

Answer the following questions:

1. What is the result of  $4 ** 3$ ?
2. What is the result of "15" + 110?
  - a. How do we solve this error?
3. What is the result of  $10 == "10"$ ?
4. What is the result of  $8 / 2 + 4.0$ ?
5. What is the result of  $34 > 34$ ?
6. What is the correct way to output "Hello World" from the editor?
7. Given  $(x = 1)$ , what will be the value of  $x$  after we run  $(x = x+2)$ ?
  - a. Using  $x$ , what line of code initializes a variable  $y$  that is equal to  $5x$ ?
8. What are the errors in the following line of code?  
$$\text{pi} * (5**2) = \text{area}$$
9. What is the difference between  $==$  and  $=$ ?
10. What are the operators that can be used to compare numbers?

## MORE PYZO

Take some time to start a new Pyzo file and complete the following short exercise:

Set your name equal to a variable, and then print a message introducing yourself using that variable.

Practice 2 methods of doing this..