

# 15-110 recitation 01

## Recap

- -syllabus, general policies & resources
- -what is an algorithm? math, strings & chars, booleans, types
- -editors v. interpreters
- -print statements & variables

## Reminders!

Check1 due Monday!

# Problems

## algorithms

**Problem** 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 (in English, no code necessary) to solve this.

## programming basics

**Problem**

1. Modulo cases:  $5\%3$ ,  $3\%5$
2. What is the difference between  $20/3$ ,  $20//3$ , and  $20\%3$ ?
3. What is the result of  $4 ** 3$ ?
4. Given  $(x = 1)$ , what will be the value of  $x$  after we run  $(x = x+2)$ ?
5. What is the result of  $\text{float}(1)$ ?
6. What is the result of  $\text{bool}(\text{"False"})$ ?
7. What is the result of  $10 == \text{"10"}$ ?
8. What is the result of  $34 > 34$ ?
9. What is the correct way to output "Hello World" from the editor?
10. How do you create a variable named  $x$  which is assigned the value 5?

### Bonus Questions:

What is the difference between  $==$  and  $=$ ?

What are the operators that can be used to compare numbers?