

COP 3330 9/23/26

1) Exam Comments (Quick)

- Sols Posted ✓

- Goal to return on Monday ✓

- Feedback

2) Classes

→ HUGE VARIATION IN HOW STUDENTS DID

THIS IS THE LEVEL I EXPECT STUDENTS TO BE AT.

SAW

1) Not knowing how to read in a Variable

2) Solving everything

#1 IF YOU DIDN'T KNOW HOW TO HANDLE > 1 QUESTION

THEN YOU NEED TO

(1) COME TO CLASS

(2) PRACTICE PROBS NOT ASSIGNED FOR HMR

(3) GO TO OFFICE HOURS IF STUCK ON PRACT. PROBS.

Defining our own Classes

C → "class is a struct with associated functions (in OOP methods)"

Class - a blueprint for a type

Object - as an instance of a class.

String name = "Arup"; name → "Arup"

String is the class

name (reference to an object)

Constructor method in every class
→ build object

ColonialHouse mine = new ColonialHouse("blue", ...)

modified {
 Static - "belongs to the Class"
 Instance - "belongs to the Object"

Class is made up of
 variables
 methods

An instance method can ONLY be called on an object.

objectrefname.method()

A static method is called from the class

ClassName.method()

Instance

nextInt → Scanner
 → Random
charAt → String

Static

pow
abs
sqrt

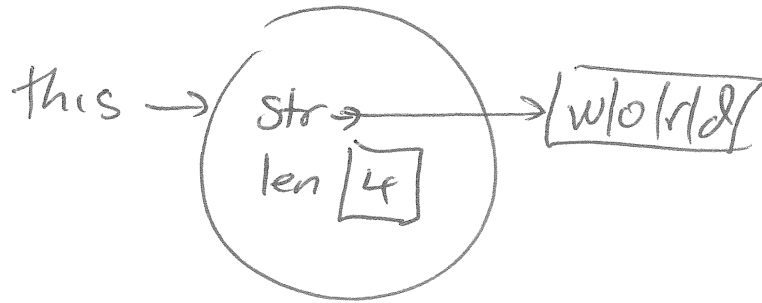
TO DO

- ① Build our own String class
 - ② Time-VL class - prewritten
- Teach rules by example!
-

New Program Formats

- ① A program w/ 2 classes in one file
- ② A program w/ 2 classes in 2 files

$S \rightarrow \text{"word"}$



Constructor: unique rules

- 1) public
- 2) name is class name
- 3) no return type listed
- 4) This refers to the object the method was called on
- 5) This. can be omitted.

toString - returns
string representation of
an object.

Every class you build
inherits from the Object
class. The toString method
in the Object class prints
the class name, @, virtual
mem address.

Why this
would be
required

m(Object o) {

 o.f(this)
 ↑
 3 passing
 this object
 as a parameter

