

activity: what is code?

(discuss with 3+ people you have never met before)

```
one way to tell your computer to print Hello World!  
class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello, World!");  
    }  
}
```

activity: what is "good code"? or, if you're feeling negative, what is "bad code"?

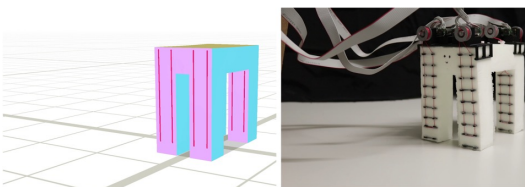
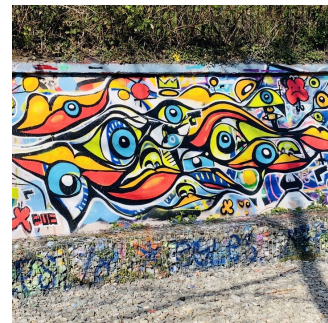
(discuss with 3+ people you have never met before)

```
class HelloWorld {public static void main(String[] args){  
    int[][] t = new  
    int[][]{{202,1026,1100,396,324,1080,192,609,555,888,72,43  
        2},  
    {3,9,8,5},{2,2,5,9},{4,6,1,9,2,11},{4,6,1,9,3,2,11,7,0,5,  
    10},{2,1,5,9},{1,9,2,5},{0,2,10,5,1,6,3,11,8,4},{10,4,2,6  
        },  
    {1,10,2,3,5,9,7,4,11,6},{7,0,3,6},{2,9,10,1},{7,1,10,6},{  
    12,0,-0}};do{while(t[13][1]+1<t[13][0].length){  
    t[13][2]=t[0][t[t[13][0]][t[13][1]]];t[0][t[t[13][0]][t[1  
    3][1]]]=t[0][t[t[13][0]][++t[13][1]]];t[0][t[t[13][0]][t[  
    13][1]++]]=t[13][2];} }while(!(--  
    t[13][0]<=(int)Math.sin(Math.PI))&&((t[13][1]=0)<1));whil  
    e(t[4][2]<=t[9][5]+3)System.out.print((char)(t[0][t[4][2]  
        -1]/t[4][2]++));}}
```

the only time
we'll take roll

hello

hello



sim to real

what is CS 136?

CS 136...

- is a computer science major requirement 🌈
- is a bridge between coding and theory
- is about how you store data
- has harder problems (problems you need a computer to solve!)
- has bigger problems (problems you need more code to solve!)
 - how to organize code
 - how to write code that people can read (people includes YOU!)
- good prep for coding interviews 💎
- going beyond "it works" to different measures of "good"
 - speed 🏎️
 - space 📦
 - elegance? ✨

how to succeed in CS 136

how to succeed in 136 (1/3)

- establish basic study habits
(this might not have been necessary in highschool; it most likely is now)
 - start homework early! (very hard to code well while stressed)
- don't work in a vacuum
 - collaborate with your friends / acquaintances / enemies
 - come to help hours (they are there for you!)
- code a lot (ideally, 5+ days per week)
 - if the homeworks are feeling too hard, talk to me; we have resources!
 - if the homeworks are too easy, do the bonus problems; do side projects; just keep coding; code code code code code

how to succeed in 136 (2/3)

- try to find your own bugs
 - this is a huge skill; it takes time (and pain) to build
- try to answer your own questions using Google
("what does IDE stand for?"; "what does this error message mean?")
 - this is also a huge skill; it also takes time (and pain) to build
- however, if you are stuck ($\geq 10+$ minutes of pain), ASK FOR HELP
 - there is literally no judgement here; we all have different starting points; my only goal is for all students to get stronger and have fun 😊👉
 - and, for what it's worth, i was a mechanical engineering undergrad and my first comp sci course was "terrifying" (though, eventually, fun)



disclaimer

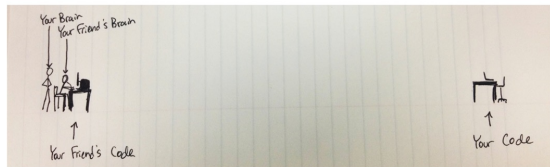
i taught this class last semester,
and i am making some changes

let me know what you think
😊👍

look at website

review collaboration policy

When you help another student with their code, your own code should remain 50 feet away. Help them with your brain, not your own solution.



Implement a postscript interpreter in java

Implementing a full PostScript interpreter in Java is a complex task that goes beyond the scope of a simple code example. PostScript is a programming language used for creating vector graphics and is known for its complexity.

Here, I'll provide you with a basic outline of how you can start building a simple PostScript interpreter in Java. You can expand upon this foundation to create a more complete interpreter.

```
java
import java.io.*;
import java.util.*;

public class PostScriptInterpreter {
    private Stack<Object> stack;
    private Map<String, Object> dictionary;

    public PostScriptInterpreter() {
        stack = new Stack<>();
        dictionary = new HashMap<>();
    }

    public void interpret(String postScriptCode) {
        // Split the PostScript code into tokens
    }
}
```

ChatGPT, etc. are "allowed," but...

- you absolutely positively 100% cannot copy and paste code
 - unless i gave you the code then it is A OK 😊👍
- 🚫 use at your own risk
 - exams will be in-person and on-paper
 - exams will specifically test knowledge of the homework

course resources!

people

- 1 Jim
 - Lectures, Lab, Help Hours
- 1 Lida
 - Email
- 12 TA's
 - Help Hours, Lab
- Our goal is to help every student succeed in CS 136. I don't foresee any issues, but feel free to let me or Lida know if anything comes up 😊👍

CS 136 Fall Schedule	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1:00-2:00				217A (1-2:30pm) Lab	217A (1-2:30pm) Lab		217A (2-5pm) TA Hours
2:00-2:30							
2:30-3:00pm				217A (2:30-4pm) Lab	217A (2:30-4pm) Lab		
3:00-4:00pm							
4:00-5:00pm		217A (4-6pm) TA Hours	217A (4-6pm) TA Hours				
5:00-6:00pm							
7:00-8:00pm		217A (7-10pm) TA Hours	217A (7-10pm) TA Hours	TCL 216 (7-9pm) LecHW Review			
8:00-9:00pm							
9:00-10:00pm							

we have great resources (if you use them)

- Help Hours
 - **TA Help Hours**
 - **Jim Help Hours**
 - **Lecture / Homework Review**
 - if, at any point during the course, you want some extra review of lecture or homework, please attend 😊👍
 - could come every week
 - could come the week after you were sick
 - could come on a week where your background is weaker

end on an upbeat note

this course will give you the
power to make things!

what do you want to make?

Homework-00 is due
Monday @ 9 pm 🎉

Colloquium is Friday @ 2:35 pm in Wege (TCL 123)

💎 You are invited! 💎

let's do
Tutorial-00
now 🩺