

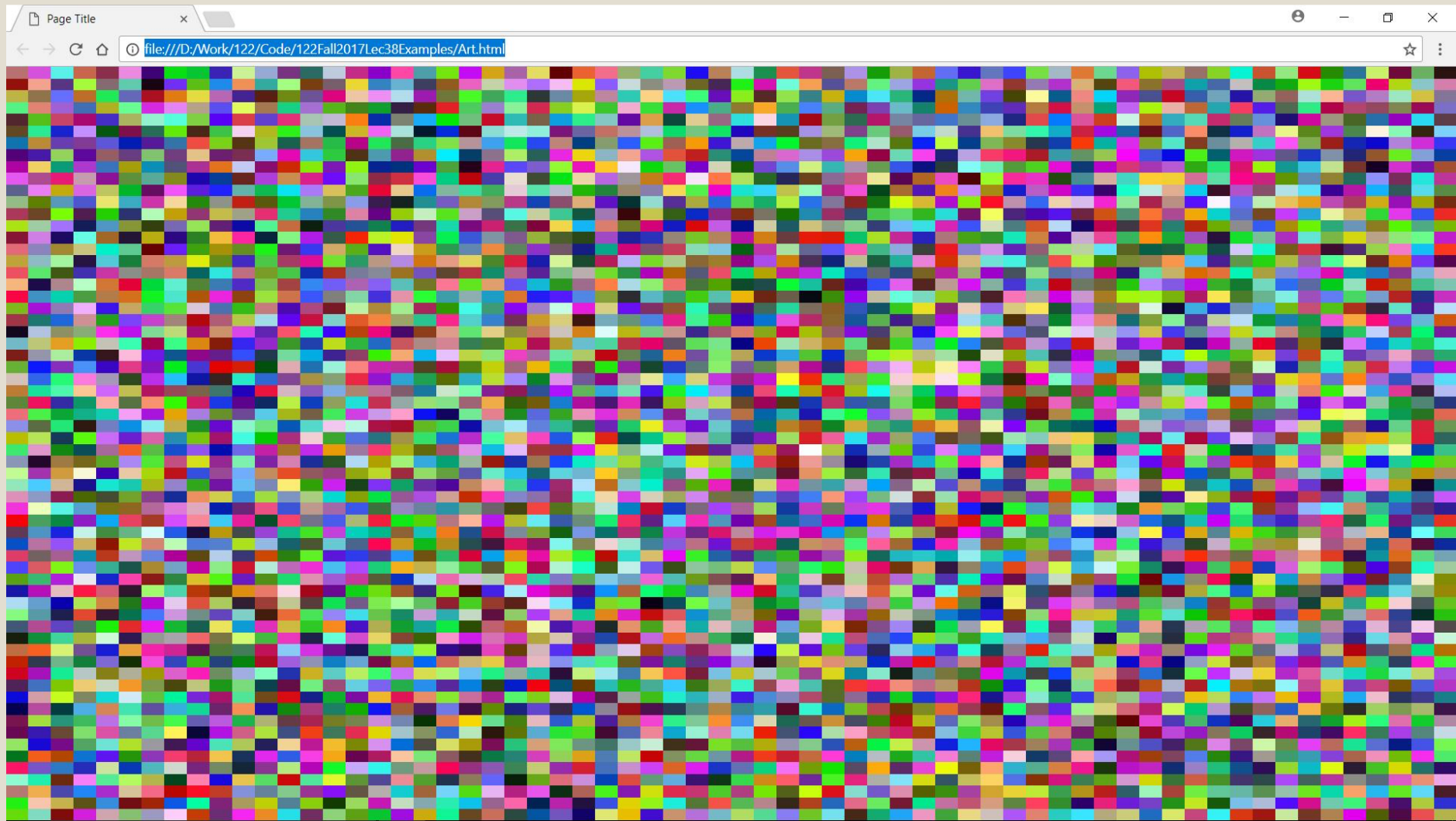
Announcements

- **Quiz #5 on Wednesday**
- **Project #5 due on Wednesday**

- **Final Exam: Wednesday 12/13**
4:00PM to 6:00PM
Room: TBA

- **Please complete course evaluations:**
<https://www.courseevalum.umd.edu/>

Make Some Art... (Recursive version)



More Recursion Examples

1. `function power(base, exponent)`

returns the value of “base” raised to the power “exponent”

2. `function fibonacci(n)`

Returns the nth term in the Fibonacci sequence

Are the recursive solutions better than the looping solutions?

- More elegant?
- Faster/slower?

Recursion Example

- ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
- ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
- ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM
 - ITEM

Arbitrarily deep “list of lists”

Why is this hard to do with loops?

Example: [recursionLists.html](#)